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LIST

SPECIMENS

LEPIDOPTERINAE

THE COLLECTION

BRITISH MUSEUM

FRANCIS WALKER, F.R.S.

PART IX. NOCTUIDAE

PRINTED BY ORDER OF THE TRUSTEES

LONDON 1862

1851

ASPECTS

THEODORE ROBERTS ASPECTS

OF THE

BRITISH MUSEUM

AND

THE

THE

LIST
OF THE
SPECIMENS
OF
LEPIDOPTEROUS INSECTS
IN
THE COLLECTION
OF THE
BRITISH MUSEUM.

BY
FRANCIS WALKER, F.L.S.

PART IX.—NOCTUIDÆ.

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JOHN EDWARD GRAY

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P R E F A C E .

THE object of the present Catalogue is to give a complete list of all the genera and species of Noctuidæ known to exist in the different collections. The letters *a, b, c, &c.*, after the species, denote the specimens now contained in the British Museum, followed by the *habitat* and the mode in which each of them was obtained, and the absence of these *letters* indicates the species which are desiderata, and therefore desirable to be procured for the collection.

JOHN EDWARD GRAY.

British Museum,
October, 1856.

PREFACE.

The object of the present Catalogue is to give a complete list of all the genera and species of Noctuidæ known to exist in the British collection. The letters A, B, C, &c., after the species, denote the specimens now contained in the British Museum, followed by the Author and the mode in which each of them was obtained, and the absence of these letters indicates the species which are desiderata, and therefore desirable to be procured for the collection.

JOHN EDWARD GRAY.

British Museum.

August 1856.

CATALOGUE
OF
LEPIDOPTERA HETEROCERA.

THIRD SERIES.

Tribe 7. NOCTUITES.

Corpus plerumque robustum. Proboscis sæpissime mediocriter longa. Palpi distincti, sæpe longiusculi, raro longissimi. Antennæ setacæ, graciles, thorace longiores, *maris* nonnunquam pectinatæ. Abdomen alas posticas sæpissime superans. Pedes mediocriter longi et robusti, nonnunquam graciles; tibiæ posticæ sæpissime calcariis quatuor longis. Alæ mediocriter latæ, raro angustæ aut latissimæ; anticæ apud costam rectæ, apice rotundatæ aut angulatæ, margine exteriori sæpissime integro. Larva raro pilosa. Pupa sæpissime nuda.

Noctuidæ, *Steph. Syst. Cat.* 2, 62; *Ill. Brit. Ent. Haust.* ii. 100;
Herr.-Schæff.

Phalæna-Noctua et Bombyx, p., *Linn.*; *Gmel.*

Noctua, *Fab.*; *Haw.*, &c.

Noctuæ Bombycoides, Genuinæ et Semigeometræ, *Hübner. Verz.*
Schmett.

Noctuina (Noctuities, Catocalites et Phytometrites), *Newman, Ent.*
Mag. ii. 382.

Noctuæ, *Boisd. Ind. Méth.*

Noctuelites, *Latr. ; Godart ; Guénée, Hist. Nat. Noct.*

Noctuiina, *Stainton, Ins. Brit. Lep. Tin. 4.*

Noctuo-Bombycidi, *Guénée, Ann. Soc. Ent. Fr. vi. 313.*

Body generally stout. Proboscis very generally moderately long. Palpi distinct, often rather long, very long in a few species. Antennæ setaceous, slender, longer than the thorax, rarely pectinated, except in the males of some species. Abdomen generally extending beyond the hind wings. Legs most frequently moderately long and stout, occasionally slender; hind tibiæ generally with four long spurs. Wings moderately broad, rarely narrow or very broad, seldom long. Fore wings straight in front, rounded or angular at the tips, moderately or very oblique along the exterior border. Larva generally naked, cylindrical and robust, and with ten prehensile feet, in some families elongate and slender, more or less looping, and with eight or sixteen prehensile feet. Pupa mostly changing in the ground, rarely in a slight web.

The distinction between the *Noctuities* and the *Bombycites* has been already mentioned, and the former, with very few exceptions, may easily be distinguished from the *Geometrites*, but some of the aberrant groups are closely allied to the *Pyrallites*, whose structure is extremely variable.

Div. 1.

Palpi breves aut mediocres; articulus 3us nunquam longus nec spatulatus.

Noctuelites Trifidæ, *Guénée.*

Div. 2.

Palpi semper longi et ascendentes; articulus 3us longus, filiformis, nonnunquam spatulatus.

Noctuelites Quadrifidæ, *Guénée.*

Div. 1.

Statura sæpissime mediocris. Corpus sæpissime robustum. Palpi plus minusve determinati; articulus 3us nunquam longissimus nec spatulatus. Thorax plus minusve pilosus. Alæ mediocres; posticæ minus amplæ; vena 1a inferior dum adest sæpissimæ debilior et apud areolæ medium inserta, plica discali contigua.

Species generally of moderate size. Body most frequently stout. Palpi more or less apparent; third joint never very long, nor enlarged towards the tip. Thorax more or less pilose. Wings of moderate breadth, or narrow. Hind wings less ample than the fore wings; first inferior vein, when apparent, less developed than the others, and inserted in the middle of the areolet near the discal fold.

Subdiv. 1.

Palpi breves, validi. Pedes non longi.

Palpi short, stout. Legs not long.

Trifidæ Bombyciformes, *Guénée*.

Subdiv. 2.

Palpi validi, bene determinati. Pedes robusti.

Palpi stout, well-developed. Legs robust.

Trifidæ Genuinæ, *Guénée*.

Subdiv. 3.

Corpus gracile. Pedes longi, graciles. Alæ latæ.

Body slender. Legs long, slender. Wings broad.

Trifidæ Minores, *Guénée*.

Subdiv. 1.

A. Alarum posticarum venæ costalis et subcostalis basi disjunctæ.

Fam. 1. CYMATOPHORIDÆ, *Herr.-Schæff*.

B. Alarum posticarum venæ costalis et subcostalis basi conjunctæ, aut basim versus connexæ.

A. Palpi bene determinati. - Fam. 2. BRYOPHILIDÆ, *Guén*.

B. Palpi breves. - - - Fam. 3. BOMBYCOIDÆ, *Guén*.

Fam. 1. CYMATOPHORIDÆ.

Corpus gracile, aut vix robustum. Proboscis mediocriter longa. Palpi plus minusve pilosi, breviusculi aut caput paullo superantes. Antennæ simplices, sæpe subserratæ. Abdomen alas posticas non aut perpaullo superans. Pedes graciles aut subvalidi;

tibiæ posticæ calcaribus quatuor longis. Alæ latæ aut sat latæ ; anticæ apud costam rectæ aut subconvexæ, apice rotundatæ aut vix angulatæ, margine exteriori subobliquo aut sat obliquo.

Noctuo-Bombycidæ, *Guén. Noct.* i. 9.

Noctuo-Bombycini, p., Bombycoides, p., et Hadenides, p., *Boisd. Ind. Méth.* 94, 130.

Hadenidi, p., Bombycoidi, p., et Noctuo-Bombycidi, p., *Steph. Cat. Brit. Lep.* 100, 114, 119,

Cymatophoridæ, *Herr.-Schæff. Eur. Schmett.* ii. 167.

Body moderately stout, or more or less slender. Antennæ simple, often slightly serrated. Abdomen extending as far as or very little beyond the hind wings. Legs slender or moderately stout ; hind tibiæ with four long spurs. Wings broad, or moderately broad. Fore wings straight or slightly convex in front, rounded or hardly angular at the tips, slightly or moderately oblique along the exterior border.

A. Thorax cristatus.

A. Alæ anticæ squama basali distincta. 1. GONOPHORA, *Bruand.*

B. Alæ anticæ squama basali nulla aut minima.

2. THYATIRA, *Ochs.*

B. Thorax non cristatus.

A. Palpi breves, caput non superantes. - 3. LEPTINA, *Guén.*

B. Palpi brevissimi. - - - 4. CORULA, *Walk.*

C. Palpi porrecti, caput superantes. 5. CYMATOPHORA, *Treit.*

Genus 1. GONOPHORA.

Corpus sat robustum. Proboscis mediocriter longa. Palpi porrecti, caput paullo superantes ; articulus 2us pilosissimus ; 3us gracilis, linearis, breviusculus. Antennæ simplices. Abdomen alas posticas perpaullo superans. Pedes mediocriter longi et validi ; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ ; anticæ subacuminatæ, apud costam rectæ, margine exteriori mediocriter obliquo.

Gonophora, *Bruand, Ann. Soc. Ent. Fr. 2me Sér.* vii. 42.

Phalæna-Noctua, p., *Linn. ; Gmel.*

Noctua, p., *Fabr. ; Wien. Verz. ; Esp. ; Hübn. ; Haw. ; Donovan.*

Thyatira, p., Ochs.; Treit.; Dup.; Boisd.; Guén.; Steph.; Herr.-Schæff.

Strophia, p., Meigen.

Body moderately stout. Proboscis moderately long. Palpi porrect, extending a little beyond the head; second joint very pilose; third slender, linear, rather short. Antennæ simple. Abdomen extending very little beyond the hind wings. Legs moderately long and stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, very slightly acuminate at the tips, moderately oblique along the exterior border; first and second inferior veins contiguous at the base; third remote; fourth very remote.

Europe.

1. GONOPHORA DERASA.

Cervina, subtus albida; thorax albo bifasciatus; abdomen pallidissime fuscens; alæ cinereo-fuscae anticæ cervino varicæ fasciis tribus obliquis costaque media albis, ocellis duobus strigisque lanceolatis discalibus fusco-albis; posticæ albido marginatæ et subfasciatæ.

Gonophora derasa, Bruand, Ann. Soc. Ent. Fr. 2me Sér. vii. 42.

Phalæna-Noctua derasa, Linn. Syst. Nat. i. 2, 158. Gmel. ed. Syst. Nat. i. 5, 2568, 158. Donovan. Brit. Ins. vii. 17, pl. 223, f. 1.

Stew. El. Nat. Hist. ii. 190. Turt. Syst. Nat. iii. 320.

Noctua derasa, Fabr. Sp. Ins. ii. 229, 103; Mant. Ins. ii. 164, 200; Ent. Syst. iii. 2, 85, 250. Wien. Verz. 87, 2. Kühn. Naturf. ii. pl. 1, f. 7. Naturf. 1774, 10. Bork. Eur. Schmett. iv. 657. 281. Esp. Schmett. iv. pl. 142, f. 1; pl. 193, f. 4, 6. Hübn. Eur. Schmett. Noct. pl. 14, f. 66. Haw. Lep. Brit. 244.

Thyatira derasa, Treit. Schmett. von Eur. v. 165, 2. Steph. Ill. Brit. Ent. Haust. iii. 47, 1; Cat. Brit. Lep. 103, 2. Duponch. Hist. Nat. Léop. Fr. vii. 43, pl. 103, f. 2. Guén. Ind. 245; Hist. Nat. Noct. i. 11, 1. Boisd. Ind. Méth. 130, 1042. Westw. & H. Brit. M. i. 201, pl. 41, f. 13; pl. 42, f. 114. Herr.-Schæff. Eur. Schmett. ii. 170, 10.

Noctua Pyritoides, Hüfn. Berl. Mag. iii. 400.

———, Wilkes, pl. 6, f. 3. Harris, V. M. 9. Enjr. Pap. d' Eur. pl. 530.

Habrosyne derasa, Hübn. Verz. Schmett. 236, 2354.

Strophia derasa, Meig. *Handb. Ent.* 167, 48 ; *Syst. Besch. Eur. Schmiett.* iii. 1742, pl. 19, f. 5.

a—g. England. From Mr. Stephens' collection.

h—k. England.

l—o. Europe. From M. Becker's collection.

p, q. ———?

North America.

2. GONOPHORA SCRIPTA.

Cervina, subtus albida ; caput albidum ; thorax albido fasciatus ; abdomen pallidissime fuscescens ; alæ anticæ cinereæ, cervino variæ, fasciis tribus obliquis, costa media, ocellis duobus strigisque lanceolatis discalibus albis ; posticæ subcinereæ, albido marginatæ et subfasciatæ.

Thyatira scripta, Gosse, *Canadian Naturalist*, 249.

Thyatira abrasa, Guén. *Noct.* i. 12, 2.

a—d. New York. Presented by E. Doubleday, Esq.

e. Orilla, West Canada. From Mr. Bush's collection.

Asia.

3. GONOPHORA GLORIOSA.

G. scriptæ simillima ; alæ anticæ angulo albido interiore magis determinato.

Thyatira gloriosa, Boisd. *MSS.*

Thyatira abrasa, var. gloriosa, Guén. *Noct.* i. 12, A.

Caucasus.

Genus 2. THYATIRA.

Corpus sat gracile. Proboscis mediocriter longa. Palpi ascendentes, caput paullo superantes ; articulus 2us pilosissimus ; 3us gracilis, linearis, breviusculus. Antennæ subserratæ. Abdomen alas posticas non superans. Pedes sat graciles ; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ ; anticæ apud costam vix convexæ, apice acuminatæ, margine exteriori subobliquo.

Thyatira, Hübn. *Verz. Schmiett.* 236.

Phalæna-Noctua, p., Linn. ; Gmel.

Noctua, p., *Fabr.*; *Wien. Verz.*; *Esp.*; *Hübner.*; *Haw.*; *Donov.*; *Bruand, Ann. Soc. Ent. Fr. 2me Sér. vii. 42.*

Thyatira, p., *Ochs.*; *Treit.*; *Dup.*; *Boisd.*; *Guén.*; *Steph.*; *Herr.-Schæff.*

Strophia, p., *Meigen.*

Calleida, *Sodoff, Bull. Soc. Imp. Nat. Mosc. 14, 1837.*

Body rather slender. Proboscis moderately long. Palpi ascending, extending a little beyond the head; second joint very pilose; third joint slender, linear, rather short. Antennæ minutely serrated. Abdomen not extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings hardly convex in front, rounded at the tips, slightly oblique along the exterior border.

Europe.

1. THYATIRA BATIS.

Fusca; thorax lineolis transversis undulosis albidis; abdomen albidum; alæ anticæ maculis tribus basalibus tribusque exterioribus fuscis albo-nigroque marginatis, his ex parte roseis; posticæ pallide fuscae, basi ciliis fasciæque albidis.

———, *Réaumur. Ins. i. pl. 7. Merian, Ins. Eur. iii. pl. 21, f. 1. Roës. Ins. iv. pl. 26. Wilkes, pl. 10, f. 6. Harr. Ex. pl. 13, f. 3; V. M. 13.*

Thyatira Batis, *Treit. Schmett. Eur. 2, 162, 1. Hübner. Verz. Schmett. 236, 2355. Dup. Hist. Nat. Lép. Fr. vii. 46, pl. 103, f. 3. Curt. Brit. Ent. ii. pl. 72. Steph. Ill. Brit. Haust. iii. 48, 2; Cat. Brit. Lep. 103, 1. Boisd. Ind. Méth. 130, 1041. Guén. Ind. 245; Hist. Nat. Noct. 12, 3. Herr.-Schæff. Eur. Schmett. ii. 170, 9.*

Phalæna-Noctua Batis, *Linn. Syst. Nat. i. 2, 286, 97; Faun. Suec. 1158. Gmel. ed. Syst. Nat. i. 5, 2546, 97.*

Noctua Batis, *Fabr. Sp. Ins. ii. 216, 42; Mant. Ins. ii. 141, 56; Ent. Syst. iii. 2, 30, 73. Wien. Verz. f. 1, 7. Esp. Schmett. iv. pl. 86, f. 6—8; pl. 103, f. 7—9. Bork. Eur. Schmett. iv. 159, 65. Hübner. Eur. Schmett. Noct. 14, pl. 65. Haw. Lep. Brit. 245.*

Strophia Batis, *Meig. Handb. Ent. 166, 47, pl. 12, f. 10; Syst. Beschr. Eur. Schmett. 174, 1, pl. 109, f. 6.*

a, b. England. From Mr. Carter's collection.

c—l. England. From Mr. Stephens' collection.

m. England. From Mr. Stevens' collection.

n—p. England.

q—s. Europe. From M. Becker's collection.

t. ———?

North America.

2. THYATIRA PUDENS.

Fusca ; *alæ anticæ lineis angulosis transversis, lunulis marginalibus nebulisque nigris; maculis basalibus posticis et costalibus fuscescentibus roseo-albo cinctis; posticæ cinereæ, dimidio basali lineaque transversa albidis.*

Thyatira pudens, Guén. Noct. i. 13, 5.

a. Northern United States. Presented by E. Doubleday, Esq.

3. THYATIRA CYMATOPHOROIDES.

Cinerea, robusta; palpi porrecti, caput superantes; antennæ fulvæ, graciles; alæ anticæ nigro ex parte conspersæ, rubescente suffusæ, gutta basali, fascia, lituris costalibus subapicalibus, guttis marginalibus maculaque apud angulum interiorem nigris, gutta discali lineisque duabus exterioribus transversis undulatis fuscis; posticæ fascia subobsoleta.

Var. β . *Alæ anticæ fascia maculisque nigris nullis.*

Thyatira Cymatophoroides, Guén. Noct. i. 13, 6.

Cinereous, stout. Proboscis rather short. Palpi porrect, extending somewhat beyond the head; third joint short, slender. Antennæ tawny, slender. Fore wings partly sprinkled with black, with a slight reddish tinge, which is most prevalent near the base, with a black basal spot, with a black band near the base, with some black costal subapical marks, with black marginal dots, and with a black spot by the interior angle; also with a brown discal dot, and with two exterior transverse undulating brown lines. Hind wings with a slight band, which is darker on the basal side, and paler exteriorly. Length of the body 6—8 lines; of the wings 18—20 lines.

Var. β . Fore wings without the black band and the black spots.

This species differs much from the other *Thyatiræ*, and will probably be separated from that genus.

a—d. New York. Presented by E. Doubleday, Esq.

e, f. Orilla, West Canada. From Mr. Bush's collection.

g. North America. From Mr. Milne's collection.

Asia.

4. THYATIRA VICINA.

Pallide fusca ; thorax utrinque lineis duabus obliquis albidis ; abdomen albidum ; alæ anticæ basi, maculis duabus costalibus subapicalibus connexis duabusque posticis roseis albido marginatis.

Thyatira vicina, Guén. Noct. i. 13, 4.

Very closely allied to *T. Batis*.

Java.

5. THYATIRA REPUGNANS.

Albida ; abdomen pallide cervinum, basi albidum ; alæ anticæ cinereæ, fusco conspersæ, lineis angulosis fuscis subfasciatae, albido-cervino quadrimaculatae, basi albido-cervinae, costa maculaque parva discali cervinis ; posticæ fuscae, basi albæ.

Whitish. Proboscis long. Abdomen pale fawn-colour, whitish at the base. Fore wings gray, sprinkled with brown, and slightly traversed by zigzag brown lines; base whitish, fawn-colour in front; a small discal fawn-coloured spot, a large apical spot and two smaller posterior marginal spots partly fawn-colour, partly whitish. Hind wings brown, with pale fawn-coloured borders, white towards the base, and with a white streak by the interior angle. Length of the body 6—7 lines; of the wings 14—16 lines.

a. North India. From Mr. James' collection.

b. Ceylon. Presented by R. Templeton, Esq.

Genus 3. LEPTINA.

Corpus gracile. Proboscis mediocriter longa. Palpi breves, porrecti, graciles, caput non superantes; articulus 3us minutus, conicus. Antennæ graciles, simplices. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ; anticæ apud costam subconvexæ aut rectæ, apice rotundatæ, margine exteriori perobliquo. *Mas.*—Antennæ pubescentes. *Fæm.*—Antennæ simplices.

Leptina, Guén. Noct. i. 14.

Body slender. Proboscis moderately long. Palpi short, porrect, slender, not extending beyond the head; third joint minute,

conical. Antennæ slender, simple. Abdomen hardly extending beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings rather narrow. Fore wings slightly convex in front, rounded at the tips, very oblique along the exterior border. *Male*.—Antennæ pubescent. *Female*.—Antennæ simple.

A. Alæ anticæ apud costam convexæ.

A. Alæ anticæ ocello nullo discali. - - - dormitans, Guén.

B. Alæ anticæ ocello discali. - - - Ophthalmica, Guén.

B. Alæ anticæ apud costam rectæ. - - - Doubledayi, Guén.

1. LEPTINA DORMITANS.

Cinerea; alæ anticæ lineolis transversis subobsoletis angulosis albidis nigro marginatis maculaque costali subapicali nigricante; posticæ pallide cinereæ.

Leptina dormitans, Guén. Noct. i. 15, 7.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.

2. LEPTINA OPHTHALMICA.

Albida; alæ anticæ cinereæ, basi oblique albæ, apud costam exteriorem repandæ albide, striga obliqua apicali, guttis marginalibus, linea transversa angulosa ocelloque discali fuscis; posticæ canescentes.

Leptina ophthalmica, Guén. Noct. i. 15, 8.

a—c. New York. Presented by E. Doubleday, Esq.

3. LEPTINA DOUBLEDAYI.

Albida; alæ anticæ basi oblique albæ, vitta arcuata fusca, lineis duabus obliquis transversis albis, maculisque duabus discalibus nigricantibus.

Leptina Doubledayi, Guén. Noct. i. 15, 9.

a. Northern United States. Presented by E. Doubleday, Esq.

Genus 4. CORULA.

Mas. Corpus gracile. Proboscis breviuscula. Palpi brevissimi. Antennæ subpectinatae, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ vix latiusculæ; anticæ apud costam subconvexæ, apice subrotundatæ, margine exteriori mediocriter obliquo.

Male. Resembles the genus *Leptina*. Body slender. Proboscis rather short. Palpi very short. Antennæ slightly pectinated, more than half the length of the body. Abdomen extending as far as the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings slightly convex along the costa, somewhat rounded at the tips, moderately oblique along the exterior border; first and second inferior veins connected at the base; third hardly nearer to the second than to the fourth.

1. CORULA GEOMETROIDES.

Mas. *Cinerea*; thorax fascia nigra, albido marginata; abdomen canum; alæ anticæ lineis tribus transversis nigris albido marginatis liturisque duabus (una discali, altera costali) nigris; posticæ albidæ, cinereo marginatæ.

Male. Cinereous. Thorax with a black whitish-bordered band. Abdomen hoary. Fore wings with three transverse black lines, which have whitish borders; a black discal mark which is contiguous to the inner side of the second band, and a blackish mark on the costa between the second and third bands. Hind wings whitish, with cinereous borders. Length of the body 4 lines; of the wings 13 lines.

a, b. Sidney. From Mr. Lambert's collection.

Genus 5. CYMATOPHORA.

Corpus gracile. Proboscis mediocriter longa. Palpi porrecti, graciles, vix pilosi, caput perpaullo superantes; articulus 3us linearis, 2i dimidio brevior. Antennæ sat graciles, subserratæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latæ; anticæ apud costam subconvexæ, apice vix angulatæ, margine exteriori subobliquo.

Chymatophora, Guénée, *Ann. Soc. Ent. Fr.* vi. 315; *Noct.* i. 16.

Cymatophora, Treit.; Boisd.; Steph.; Meig.; Herr.-Schæff.

Kymatophora, Treit. Suppl.

Ceropacha, Steph. Ill. Brit. Ent. Haust. iii. 51. Guénée, Ann. Soc. Ent. Fr. vi. 314.

Tethea, Ochs.

Polyploca, *Palimpsistis*, *Tethea*, et *Asphalia*, Hübn. Verz. Schmett. 273.

Ceratopacha, Steph. Cat. Brit. Lep. 119.

Body slender. Proboscis moderately long. Palpi porrect, slender, hardly pilose, extending very little beyond the head; third joint linear, less than half the length of the second. Antennæ rather slender, very minutely serrated. Abdomen extending as far as the hind wings. Legs slender; hind tibiæ with four long spurs. Wings broad. Fore wings slightly convex in front, hardly angular at the tips, slightly oblique along the exterior border; first and second inferior veins nearly contiguous at the base; third not remote; fourth proceeding from the base of the wing.

Group 1.

1. CYMATOPHORA DUPLARIS.

Cinerea; abdomen pallidum; alæ anticæ lineis transversis undulatis fuscescentibus guttisque duabus discalibus nigris; posticæ pallidiores.

Phalæna-Pyralis duplaris, Linn. Faun. Suec. 1357. Gmel. ed. Syst. Nat. i. 5, 2526, 343. Haw. Lep. Brit. 274.

Bombyx binotata, Fabr. Ent. Syst. iii. 1, 486, 247.

Noctua bicolor, Esp. Schmett. iv. 70, pl. 197, f. 4.

Noctua bipuncta, Bork. Eur. Schmett. iv. 627, 264.

Noctua undosa, Hübn. Eur. Schmett. Noct. pl. 44, f. 211; Larv. Lep. iv. Noct. ii. Gen. P, d, f. 1.

Cymatophora bipuncta, Treit. Schmett. Eur. v. 1, 92, 8. Dup.

Hist. Nat. Léop. Fr. iii. 71, 84, f. 1. Guén. Ind. 236. Meig.

Syst. Beschr. Eur. Schmett. iii. 63, 5, pl. 90, f. 5. Boisd. Ind.

Méth. 93, 702. Herr.-Schæff. Eur. Schmett. ii. 170, 8.

Tethea duplaris, Hübn. Verz. Schmett. 273, 2360.

Ceropacha duplaris, Steph. Ill. Brit. Ent. Haust. iii. 52, 2.

Ceratopacha duplaris, Steph. Cat. Brit. Lep. 108, 2. Westw. & H. Brit. Moths, i. 202, pl. 43, f. 2.

Cymatophora duplaris, Guén. Hist. Nat. Noct. i. 17. 10.

———, Engr. Pap. d' Eur. 535.

a—j. England. From Mr. Stephens' collection.

k—m. England.

n—q. Europe. From M. Becker's collection.

2. CYMATOPHORA FLUCTUOSA.

Cinerea ; abdomen canum ; alæ anticæ lineis transversis undulatis obscurioribus et canis ; posticæ nonnumquam albidæ, cinereo fasciatæ et marginatæ.

Noctua fluctuosa, *Hübner. Eur. Schmett. Noct.* pl. 44, f. 212. *Haw. Lep.* 273.

Ceropacha fluctuosa, *Steph. Ill. Brit. Haust.* iii. 51, 1. *Guén. Ess. Noct. Ann. Soc. Ent. Fr.* vi. 236.

Cymatophora fluctuosa, *Treit. Schmett. Eur.* v. 1, 94, 9. *Dup. Suppl.* iii. 162, pl. 15. *Meig. Syst. Besch. Eur. Schmett.* iii. 63, 6, pl. 90, f. 5. *Guén. Noct.* i. 17, 11. *Herr.-Schæff. Eur. Schmett.* ii. 170, 7.

—————, *Engr. Pap. d' Eur.* 534.

Ceratopacha fluctuosa, *Steph. Cat. Brit. Moths*, 108, 1. *Westw. & H. Brit. Moths*, i. 202, pl. 43, f. 1.

Tethea fluctuosa, *Hübner. Verz. Schmett.* 273, 2361.

a—f. England. From Mr. Stephens' collection.

g, h. England.

i, j. Europe. From M. Becker's collection.

Group 2.

Corpus magis pilosum, plus robustum. Palpi crassiores, pilosi, ascendentes. Pedes vix graciles. Alæ mediocriter latæ.

Asphalia, *Hübner.*

Body stouter, more pilose. Palpi stouter, pilose, ascending. Antennæ rather stout. Legs hardly slender. Wings moderately broad.

3. CYMATOPHORA RUFICOLLIS.

Cinerea ; alæ anticæ cano variæ, annulis duobus incompletis liturisque posterioribus nigris, annulo interiore subovato, exteriori subquadrato ; posticæ canæ, marginibus cinerascentibus.

Phalæna-Noctua ruficollis, *Gmel. ed. Syst. Nat.* i. 5, 2568, 1149.

Noctua ruficollis, *Wien. Verz.* 87, 7. *Fabr. Mant. Ins.* ii. 165, 204 ; *Ent. Syst.* iii. 2, 86, 255. *Bork. Eur. Schmett.* iv. 626, 263. *Hübner. Eur. Schmett. Noct.* pl. 43, f. 207. *Larv. Lep.* iv. *Noct.* ii. *Gen. P. c.* f. 1, a.

Cymatophora ruficollis, *Treit. Schmett. Eur.* v. 1, 89, 6. *Dup. Hist. Nat. Léop. Fr.* vi. 3, 168, pl. 83, f. 5. *Meig. Syst. Besch. Eur. Schmett.* iii. 84, 7, pl. 90, f. 7. *Boisd. Ind. Méth.* 93, 700. *Guén. Noct.* i. 18, 12. *Herr.-Schæff. Eur. Schmett.* ii. 169, 1.

Ceropacha ruficollis, *Guén. Ind.* 236.

Asphalia ruficollis, *Hüb. Verz. Schmett.* 238, 2363.

———, *Engr. Pap. d'Eur.* pl. 358.

Europe.

4. CYMATOPHORA DILUTA.

Cinerea; antennæ lutescentes; abdomen albidum; alæ punctis marginalibus nigris; anticæ fasciis duabus fuscis ex parte nigro marginatis; posticæ albidæ, fascia margineque latissimo fuscis.

Phalæna-Noctua diluta, *Gmel. ed. Syst. Nat.* i. 5, 2568, 1148.

Noctua diluta, *Wien. Verz.* 87, 6. *Fabr. Mant. Ins.* ii. 165, 203.

Ent. Syst. iii. 2, 86, 254. *Esp. Schmett.* iv. pl. 128, f. 6.

Bork. Eur. Schmett. iv. 624, 262. *Haw. Lep. Brit.* 270.

Hüb. Eur. Schmett. Noct. pl. 43, f. 206; *Larv. Lep.* iv. *Noct.*

ii. *Gen. P.* b, f. 1.

Bombyx undata, *Fabr. Ent. Syst.* iii. 1, 451, 136.

Asphalia diluta, *Hüb. Verz. Schmett.* 238, 2362.

Ceropacha diluta, *Steph. Ill. Brit. Haust.* iii. 52, 3. *Guén. Ind.*

13. *Boisd. Ind. Méth.* 93, 699.

Bombyx fasciculosa, *Bork. Eur. Schmett.* iii. 122.

Cymatophora diluta, *Treit. Schmett. Eur.* vi. 90, 7. *Dup. Hist.*

Nat. Léop. Fr. vi. 3, 164, pl. 83, f. 4—6. *Meig. Handb.* 153,

13; *Syst. Besch. Eur. Schmett.* iii. 624, pl. 90, f. 4. *Boisd.*

Ind. Méth. 699. *Herr.-Schæff. Eur. Schmett.* ii. 169, 4.

Guén. Noct. i. 18, 3.

Ceratophacha diluta, *Steph. Cat. Brit. Lep.* 98, 3. *Westw. & H.*

Brit. Moths, i. 203, pl. 43, f. 3, 4.

a. England (Bristol), Presented by J. N. Duck, Esq.

b. England. From Mr. Chant's collection.

c—o. England. From Mr. Stephens' collection.

p—t. England.

v. u. Europe. From M. Becker's collection.

5. CYMATOPHORA OR.

Cinerea ; *alæ anticæ annulo discali lineis transversis fasciisque undulatis nigricantibus* ; *posticæ subfasciatæ*.

Phalæna-Noctua flavicornis, *Linn. Syst. Nat.* i. 2, 182 ; *Faun. Suec.* 1204. *Clerck, Icon.* pl. 6, f. 9. *Gmel. ed. Syst. Nat.* i. 5, 2575, 182.

Phalæna-Noctua Or, *Gmel. ed. Syst. Nat.* i. 5, 2568, 1147.

Noctua flavicornis, *Fabr. Sp. Ins.* ii. 238, 40 ; *Mant. Ins.* ii. 179, 284. *Wien. Verz.* 72, 6. *Haw. Lep. Brit.* 272.

Noctua Or, *Wien. Verz.* 5. *Fabr. Mant. Ins.* ii. 165, 200 ; *Ent. Syst.* iii. 2, 86, 253. *Sepp. Ins.* iv. pl. 42. *Hübner. Eur. Schmett. Noct.* pl. 43, f. 210 ; *Larv. Lep.* iii. Noct. ii. Gen. P, b, f. 2, P, a, b, f. 1, 87. *Frey. Neu. Beit. Schmett.* iv. pl. 333.

Noctua gemina, *Beckwith, Linn. Trans.* ii. 4, pl. 1, f. 4—6. *Donov. Brit. Ins.* x. 59, pl. 347, f. 3. *Stew. El. Nat. Hist.* ii. 196. *Turt. Syst. Nat.* iii. 324.

Noctua consobrina, *Bork. Eur. Schmett.* iv. 622, 261. *Scriba, Ins. Gesch.* pl. 6, f. 4, b.

———, *Engr. Pap. d'Eur.* 533, a—c.

Ceropacha Or, *Steph. Ill. Brit. Haust.* iii. 53, 4. *Guén. Ind.* 236.

Cymatophora Or, *Treit. Schmett. Eur.* v. 1, 98, 11. *Dup. Hist. Nat. Léop. Fr.* vi. 3, 161, pl. 82, f. 3. *Meig. Syst. Besch. Eur. Schmett.* iii. 61, pl. 90, f. 2. *Boisd. Ind. Méth.* 92, 697. *Herr.-Schæff. Eur. Schmett.* ii. 169, 5. *Guén. Noct.* i. 18, 14.

Palimpsestis Or, *Hübner. Verz. Schmett.* 273, 2358.

Ceratopacha Or, *Steph. Cat. Brit. Lep.* 108, 4.

a—m. England. From Mr. Stephens' collection.

n—q. England.

r, s. Europe. From M. Becker's collection.

6. CYMATOPHORA OCULARIS.

Cinereo-fusca ; *antennæ fulvescentes* ; *thorax fascia antica nigra* ; *anticæ lineis transversis undulatis nigris, gutta interiore discali nigra, ocellis duobus discalibus albis connexis, exteriori coarctato* ; *posticæ subcinereæ, fascia ciliisque albis*.

Phalæna-Noctua ocularis, *Linn. Syst. Nat.* i. 2, 837.

Noctua octogena, *Esp. Schmett.* iv. pl. 184, f. 1, 2.

Noctua Or, *Bork. Eur. Schmett.* iv. 620, 260. *Scriba, Ins. Gesch.* i. pl. 6, f. 4, a.

Noctua octogesima, Hübn. *Eur. Schmett. Noct.* pl. 43, f. 209

———, *Engr. Pap. d'Eur.* 532.

Tethea octogena, Curt. *Brit. Ent.* vi. pl. 272.

Cymatophora octogena, Dup. *Hist. Nat. Léop. Fr.* vi. 3, 158, pl. 83, f. 2.

Cymatophora octogesima, Treit. *Schmett. Eur.* v. 1, 95, 10. Meig.

Handb. pl. 12, f. 6; *Syst. Besch. Eur. Schmett.* iii. 61, 1, pl. 90, f. 1. Boisd. *Ind. Méth.* 92, 696. Herr.-Schæff. *Eur. Schmett.* ii. 169, 6.

Ceropacha octogesima, Steph. *Ill. Brit. Ent. Haust.* iii. 53, 5, pl. 27, f. 2. Guén. *Ind.* 236.

Cymatophora ocularis, Guén. *Noct.* i. 19, 15.

Palempsestis octogesima, Hübn. *Verz. Schmett.* 273, 2357.

Ceratopacha ocularis, Steph. *Cat. Brit. Lep.* 109, 5.

a—c. England. From Mr. Stephens' collection.

d, e. Europe. From M. Becker's collection.

f. ———? From Mr. Milne's collection.

Group 3.

Corpus validum, pilosum. Palpi porrecti, caput sat superantes, articulo 3o longiore. Antennæ crassæ. Abdomen alas posticas paullo superans. Pedes validi. Alæ angustiores; anticæ apud marginem exteriorem sat obliquæ.

Palimpsestis, p., et *Polyploca*, Hübn.

Body stout, pilose. Palpi porrect, extending some distance beyond the head; third joint much longer than in the first and second groups. Antennæ very thick. Abdomen extending a little beyond the hind wings. Legs stout. Wings rather narrow. Fore wings rather oblique along the exterior border.

7. CYMATOPHORA FLAVICORNIS.

Cinerea; antennæ luteæ; thorax fasciculis duabus posticis albidis; alæ anticæ lineis quatuor transversis undulatis nigris, duabus intermediis duplicatis, annulis duobus discalibus nigris; posticæ albidæ, cinereo fasciatæ et marginatæ.

Noctua flavicornis, Esp. *Schmett.* iv. pl. 184, f. 1, 2. Scriba, *Ins. Ges.* iii. pl. 13, f. 8. Bork. *Eur. Schmett.* iv. 616, 259. Hübn. *Eur. Schmett. Noct.* pl. 43, f. 208; *Larv. Lep.* iv. *Noct.* ii. *Gen. P.* e, f. 2; P, a, b, f. 2. *Donov. Nat. Hist. Brit. Ins.* x. 72.

————, *Deg. Ins.* ii. 422, pl. 7. *Engr. Pap. d'Eur.* 359,
a e.

Noctua luteicornis, *Haw. Lep. Brit.* 271.

Cymatophora flavicornis, *Treit. Schmett. Eur.* i. 100. *Meig. Handb.* 153, 14; *Syst. Besch. Eur. Schmett.* iii. 62, 3, pl. 90, f. 3. *Duponch. Hist. Nat. Lép. Fr.* vi. 3, 54, pl. 83, 11. *Frey. Neu. Ges. Ins.* iv. pl. 375. *Boisd. Ind. Méth.* 92, 698. *Herr.-Schæff. Eur. Schmett.* ii. 169, 2. *Guén. Noct.* i. 19, 16.

Ceropacha flavicornis, *Steph. Ill. Brit. Ent. Haust.* iii. 54, 6. *Guén. Ind.* 236.

Palimpsestis flavicornis, *Hübner. Verz. Schmett.* 2359.

Ceratopacha flavicornis, *Steph. Cat. Brit. Lep.* 109, 6. *Westw. & H. Brit. Moths*, i. 203, pl. 43, f. 7, 8.

a—h. England. From Mr. Stephens' collection.

i—o. England.

p—w. Europe. From M. Becker's collection.

8. CYMATOPHORA RIDENS.

Viridescens; antennæ fulvæ; abdomen albidum; alæ anticæ lineis transversis undulosis annulisque duobus discalibus nigris; posticæ albidæ marginibus fuscescentibus.

Noctua ridens, *Fabr. Mant. Ins.* ii. 180, 289. *Ent. Syst.* iii. 1, 119. *Haw. Lep. Brit.* 117.

Phalæna-Noctua ridens, *Gmel. ed. Syst. Nat.* i. 5, 2569, 1152.

Phalæna-Noctua chrysoceras, *Beck, Trans. Linn. Soc.* ii. 3, pl. 1. *Stew. El. Nat. Hist.* ii. 195.

Noctua flavicornis, *Wien. Verz.* 72.

Noctua putris, *Rottem, Naturf.* viii. 44, 108.

Noctua erythrocephala, *Esp. Schmett.* iv. 309, pl. 121, f. 1—3.

Noctua xanthoceros, *Bork. Eur. Schmett.* 117. *Hübner. Noct.* pl. 43, f. 205. *Treit. Schmett. Eur.* i. 86.

Cymatophora ridens, *Dup. Hist. Nat. Lép. Fr.* iii. 151, pl. 82, f. 5, 6. *Boisd. Ind. Méth.* 92, 695. *Herr.-Schæff. Eur. Schmett.* ii. 169, 3. *Guén. Noct.* i. 20, 17.

Ceropacha ridens, *Steph. Ill. Brit. Ent. Haust.* iii. 55, 7. *Guén. Ind.* 236.

————, *Engr. Pap. d'Eur.* pl. 291, f. a—d.

Polyploca xanthoceros, *Hübner. Verz. Schmett.* 273, 2356.

Ceratopacha ridens, *Steph. Cat. Brit. Lep.* 120, 7. *Westw. & H. Brit. Moths*, i. 205, pl. 43, f. 9, 10.

a—m. England. From Mr. Stephens' collection.

n—r. England.

s, t. Europe. From M. Becker's collection.

v. France.

North America.

9. CYMATOPHORA CANIPLAGA.

Mas. *Cinerea*, sat robusta; caput et thorax anticus fusca; palpi capite breviores; antennæ subpectinatae; abdomen subcervinum; alæ anticæ fascia basali plagaque oblonga discali albidis, lineis nonnullis transversis undulatis subinterruptis, litura transversa discali guttisque submarginalibus nigris; posticæ fusco-cinereæ, basi pallidiores, litura discali obscuriore.

Male. Gray, rather stout. Head and fore part of the thorax brown, the former dark brown in front. Palpi short, not extending so far as the head; third joint very short. Antennæ slightly pectinated, whitish at the base. Abdomen somewhat fawn-colour. Fore wings with a whitish band near the base, and a whitish oblong patch in the disk, with some transverse undulating partly interrupted blackish lines, with a transverse discal blackish mark, and with a row of submarginal blackish dots. Hind wings brownish cinereous, paler towards the base, and with a darker discal mark. Length of the body 7 lines; of the wings 18 lines.

This species has much resemblance to *C. flavicornis*, but forms a distinct group in the genus.

Canada. In Mr. Saunders' collection.

Fam. 2. BRYOPHILIDÆ.

Corpus gracile. Proboscis breviuscula. Palpi ascendentes, caput paullo superantes; articulus 3us truncatus aut acuminatus. Antennæ graciles, simplices. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apice vix angulatæ, margine exteriori subobliquo.

Bryophagidi, *Guén. Ann. Soc. Ent. Fr.* vi. 322. *Steph. Cat. Brit. Lep.* 118.

Bryophilidæ, *Guén. Noct.* i. 21.

Bombycoides Jaspidiæ, *Hübner. Verz. Schmett.*

Bombycoides, p., *Boisd. Ind. Méth.* 94. *Duponch.*

Bombycoidæ, p., *Herr.-Schæff. Eur. Schmett.* ii. 173.

Body slender. Proboscis rather short. Palpi ascending, extending a little beyond the head; third joint truncate or acuminate. Antennæ slender, simple. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings hardly angular at the tips, slightly oblique along the exterior border.

- A. Palpi articulo 3o acuminato. - - - Bryophila, *Treit.*
 B. Palpi articulo 3o truncato. - - - Grammophora, *Guén.*

Genus 1. BRYOPHILA.

Corpus gracile. Proboscis breviuscula. Palpi ascendentes, caput paullo superantes; articulus 3us lanceolatus, 2i dimidio longior. Antennæ graciles, simplices. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apice vix angulatæ, margine exteriori subobliquo.

Bryophila, *Treit. Schmett. Eur. i. 57. Boisd. Ind. Méth. 96.*

Steph. Ill. Brit. Ent. Haust. Herr.-Schæff. Eur. Schmett. ii.

185. *Guénée, Ann. Soc. Ent. Fr. vi. 324; Noct. i. 22.*

Pœcilia, *Schrank; Ochs.*

Pœcilia, Metachrostis, Euthales et Cryphia, *Hübner. Verz. Schmett.*

Cryphia, *Hübner. Samml. Exot. Schmett. i. 14.*

Acronyctia, p., *Meigen.*

Body slender. Proboscis rather short. Palpi ascending, rising a little above the head; third joint lanceolate, more than half the length of the second. Antennæ slender, simple. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, hardly angular at the tips, slightly oblique along the exterior border; first and second inferior veins almost contiguous at the base; third hardly remote; fourth proceeding from the base of the wing.

Europe.

A. Alæ anticæ albæ, nigricante aut cinereo marmoratæ.

A. Alæ anticæ fascia basali nigra completa. glandifera, *W. V.*

B. Alæ anticæ fascia basali postice abbreviata.

A. Palpi minus arcuati et ascendentes. - Perla, *W. V.*

B. Palpi plus arcuati et ascendentes. - Perlodes, *Guén.*

B. Alæ anticæ cinereæ aut fuscæ.

A. Alæ anticæ fasciis distinctis albis.

a. Alæ anticæ fasciis nigro punctatis.

a. Major, obscurior, crassior; palpi breviores.

eriptrícula, *Treit.*

b. Minor, pallidior, gracilior; palpi longiores.

Vandalusiæ, *Dup.*

B. Alæ anticæ fasciis nigro maculatis.

- - Algæ, *Fabr.*

B. Alæ anticæ fasciis nullis albis.

A. Alæ anticæ striga exteriori nulla nigra.

a. Alæ anticæ maculis nullis exterioribus albidis.

i. Alæ anticæ subferruginosæ.

- - ravula, *Hüb.*

ii. Alæ anticæ non rufescentes.

- - troglodyta, *Frey.*

b. Alæ anticæ macula exteriori postica albida.

deceptrícula, *Hüb.*

B. Alæ anticæ striga exteriori nigra.

a. Alæ anticæ fascia exteriori minus arcuata.

receptícula, *Hüb.*

b. Alæ anticæ fascia exteriori plus arcuata.

i. Palpi minus ascendentes.

* Alæ anticæ breviores, apice plus acuminatæ.

fraudatrícula, *Hüb.*

** Alæ anticæ longiores, apice minus acuminatæ.

simulatrícula, *Guén.*

ii. Palpi plus ascendentes.

- - petrea, *Guén.*

1. BRYOPHILA RAVULA.

Cana; caput, thorax et alæ anticæ nigro confertim punctata; alæ anticæ cervino variæ, lineis transversis undulatis guttisque paucis nigricantibus; posticæ apud margines subcinereæ.

Var. Nigro-cinerea; abdomen et alæ posticæ cana; alæ anticæ fascia subobsoleta margineque exteriori pallidioribus, annulis duobus connexis lineisque undulatis transversis nigricantibus.

Noctua ravula, *Hüb.* *Eur. Schmett. Noct.* 461.

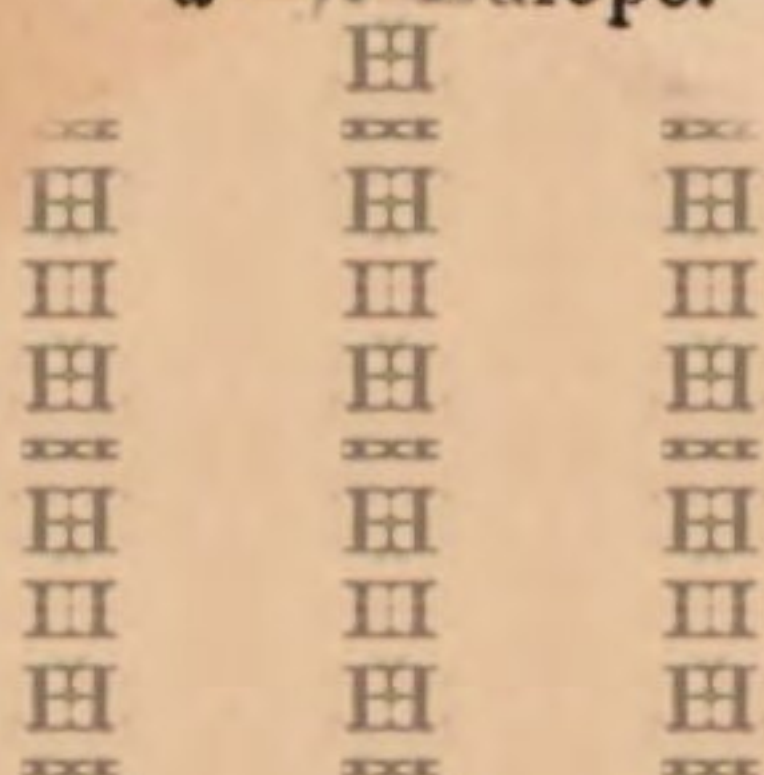
Bryophila lupulo, *Dup. Hist. Nat. Lép. Fr.* vii. 367, pl. 122, f. 6; *Suppl.* iv. 222, pl. 69. *Guén. Ann. Soc. Ent. Fr.* 1833, 197; *Ess.* 236.

Bryophila raptícula, *Boisd. Ind. Méth.* 97, 736.

Bryophila perla, *Boisd. Ramb. et Grasl. Icon. Chen.*

Bryophila ravula, *Herr.-Schæff. Eur. Schmett.* ii. 186, 26. *Guén. Noct.* i. 23, 18.

a—f. Europe. From M. Becker's collection.



2. BRYOPHILA VANDALUSIÆ.

B. ereptriculæ minor, gracilior, pallidior; palpi longiores, magis securiformes.

Bryophila Vandalusiæ, *Duponch. Suppl. Hist. Nat. Lép. Fr.* iv. 405, pl. 82. *Guén. Noct.* i. 24, 19.

B. ereptriculæ, var. ?

Andalusia.

3. BRYOPHILA EREPTRICULA.

Fusco-cinerea; abdomen et alæ posticæ cana; alæ anticæ lineis transversis undulatis nigricantibus, fasciis duabus (exteriore interrupta) liturisque intermediis albidis.

Bryophila ereptricula, *Treit. Schmett. Eur.* v. 66, 5. *Dup. Hist. Nat. Lép. Fr.* vii. 239, pl. 115, f. 4. *Geyer, Eur. Schmett.* 863. *Boisd. Icon.* pl. 71; *Ind. Méth.* 96, 732. *Guén. Ann. Soc. Ent. Fr.* 325, 236; *Noct.* i. 24, 20. *Frey. Neu. Beitr. Schmett.* i. pl. 52, f. 2; *Beitr. Gesch.* pl. 84, f. 1, 2; pl. 129. *Herr.-Schæff. Eur. Schmett.* ii. 186, 27.

Noctua spoliatricula? *Hübner, Eur. Schmett. Noct.* pl. 6, f. 26.

Acronyctia ereptricula, *Meig. Syst. Besch. Eur. Schmett.* iii. 77, 22, pl. 92, f. 5.

Europe.

4. BRYOPHILA TROGLODYTA.

B. ereptriculæ paullo major; abdomen et alæ posticæ obscuriora; alæ anticæ saturate fusco-nigræ, nunquam rufescentes.

Bryophila ereptricula, var., *Treit. Suppl.* x. 12. *Boisd. Ind. Méth.* 96.

Bryophila troglodyta, *Frey. Neu. Beitr. Schmett.* i. 102. *Guén. Noct.* i. 24, 21.

Prussia.

5. BRYOPHILA PETREA.

Palpi valde ascendentes, articulo 3o sat longo; alæ anticæ viridifusco cinereo nigroque nebulosæ, maculis duabus discalibus nigris, una rotunda, altera reniformi fulvo-cano varia; posticæ aurato cinereo-fulvæ.

Bryophila petrea, *Guén. Noct.* i. 25, 22.

Andalusia.

6. BRYOPHILA DECEPTRICULA.

Cinerea; abdomen sordide canescens; alæ anticæ strigulis variis transversis nigris, plaga basim versus albida, macula postica exteriori alba, fascia diffusa nigricante; posticæ pallide cinerascens.

- , *Engr. Pap. d' Eur.* 316, a, b.
Noctua deceptricula, Hübn. *Samml. Eur. Schmett.* 30. *Treit. Schmett. Eur.* i. 72. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 539, pl. 45, f. 5, a. *Frey. Neu. Beit. Schmett.* ii. pl. 179. *Guén. Ann. Soc. Ent. Fr.* vi. 236; *Noct.* i. 25, 23.
Noctua divisa, *Esp. Schmett.* pl. 158, f. 5, 6.

Var. β . *Murina*; abdomen murino-albidum; alæ anticæ subnebulosæ, lineis duabus flexuosis annulisque duobus intermediis nigricantibus; posticæ albidæ, margine subcinereo.

- Noctua raptracula*, Hübn. *Eur. Schmett. Noct.* pl. 6, f. 29.
Bryophila raptracula, *Treit. Schmett. Eur.* v. 1, 71, 8.
Bryophila deceptricula, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 539. pl. 45, f. 5, b. *Frey. Neu. Beit. Schmett.* ii. pl. 179, f. 1, *Herr.-Schæff. Eur. Schmett.* ii. 187, var.
Noctua pomula, *Bork. Eur. Schmett.* iv. 183, 79.
Euthales raptracula, Hübn. *Verz. Schmett.* 205, 2064.
 ———, *Engr. Pap. d' Eur.* 317, a—c.
Acronyctia raptracula, *Meig. Syst. Besch. Eur. Schmett.* iii. 76, 20, pl. 92, f. 4.
 a—c. Europe. From M. Becker's collection.

7. BRYOPHILA SIMULATRICULA.

B. fraudatriculæ affinis; alæ anticæ viridi-cinerascentes plus elongatæ, apice minus acutæ; posticæ albidæ, apud marginem exteriori nigricantes, lunula discali nigra; palpi validi, ascendentes; articulo 3o longo.

Bryophila simulatricula, *Guén. Noct.* i. 26, 24.

Florence?

8. BRYOPHILA FRAUDATRICULA.

Nigro-cinerea; abdomen cinerascens; alæ anticæ lineis tribus transversis undulosis nigris cano marginatis, annulis duobus discalibus lineisque exterioribus nigris; posticæ cinerascens.

Noctua palliola, *Bork. Eur. Schmett.* iv. 184, 80.

Noctua fraudatricula, *Hübner. Eur. Schmett. Noct.* pl. 6, f. 28.
Treit. Schmett. Eur. vi. 70, 7; *Suppl.* x. 15. *Frey. Neu. Beit. Schmett.* ii. pl. 170.

Bryophila fraudatricula, *Boisd. Icon.* pl. 71; *Ind. Méth.* 96, 734.
Herr.-Schæff. Eur. Schmett. ii. 186, 30. *Guén. Ann. Soc. Ent. Fr.* 236; *Noct.* i. 26, 25.

Acronyctia fraudatricula, *Meig. Syst. Besch. Eur. Schmett.* iii. 76.
21, pl. 92, f. 3.

Euthales fraudatricula, *Hübner. Verz. Schmett.* 205, 2063.

a—c. Europe. From M. Becker's collection.

9. BRYOPHILA RECEPTRICULA.

Nigro-cinerea; abdomen cinereum; alæ anticæ lineis transversis flexuosis ex maxima parte interruptis strigisque exterioribus nigris; posticæ cinerascens.

Noctua receptricula, *Hübner. Eur. Schmett.* 27. *Treit. Schmett. Eur.* i. 66. *Frey. Neu. Beit. Schmett.* pl. 179.

Noctua strigula, *Bork. Eur. Schmett.* 78.

Noctua degener, var., *Esp. Schmett.* pl. 158, f. 4.

———, *Engr. Pap. d'Eur.* 318, a—c.

Bryophila receptricula, *Boisd. Ind. Méth.* 96, 733. *Herr.-Schæff. Eur. Schmett.* ii. 186, 29. *Guén. Noct.* i. 27, 27.

Bryophila Algæ, var.? *Guén. Ann. Soc. Ent. Fr.* 236.

Cryphia receptricula, *Hübner. Verz. Schmett.* 205, 2066.

a, b. Europe. From M. Becker's collection.

10. BRYOPHILA ALGÆ.

Viridi-albida; thorax nigro bivittatus; abdomen sordide albidum; alæ anticæ viridi-fuscæ, basi plagisque paucis albidis, strigis guttis maculis costalibus lineisque transversis undulosis nigris; posticæ cinerascens, basi costaque albidis.

Noctua Algæ, *Fabr. Sp. Ins.* ii. 235, 128; *Mant, Ins.* ii. 173, 253;
Ent. Syst. iii. 2, 104, 313. *Scriba, Ins. Gesch.* pl. 10, f. 6.
Dup. Hist. Nat. Lép. Fr. iii. 212, pl. 86.

- Phalæna-Noctua Algæ*, *Gmel. ed. Syst. Nat.* i. 5, 2563, 1129.
Noctua degener, *Bork. Eur. Schmett.* iv. 170, 69.
Noctua degener? *Wien. Verz. E.* 4.
Noctua spoliatricula, *Treit. Schmett. Eur.* v. 1, 64, 4. *Frey. Neu. Beit. Schmett.* ii. pl. 179, f. 4.
Noctua spoliatricula? *Hübner. Eur. Schmett. Noct.* pl. 5, f. 26;
Larv. Lep. iv. *Bomb. C.*, c. f. 1, a.
 ———, *Engr. Pap. d'Eur.* 324.
Bryophila Algæ, *Boisd. Ind. Méth.* 96, 729. *Guénée, Ann. Soc. Ent.*
Fr. vi. 123; *Noct.* i. 27, 28. *Herr.-Schæff. Eur. Schmett.* ii.
 186, 28.
Acronyctia spoliatricula, *Meig. Syst. Besch. Eur. Schmett.* iii. 75,
 19, pl. 22, f. 2.
Euthales spoliatricula, *Hübner. Verz. Schmett.* 205, 2061.
Noctua strigula, *Duponch. Hist. Nat. Léop. Fr.* iii. 215, pl. 86.
Noctua degener, *Esp. Eur. Schmett.* iv. pl. 158, f. 3.
Var. Noctua mendacula, *Hübner. Eur. Schmett. Noct.* pl. 520.
Bryophila mendacula, *Boisd. Ind. Méth.* 96, 730; *Dup. Cat.*
Euthales mendacula, *Hübner. Verz. Schmett.* 205, 2065.
Noctua chloris? *Bork. Eur. Schmett.* 71.
Var. Noctua calligrapha, *Bork. Eur. Schmett.* iv. 173, 71. *Hübner.*
Eur. Schmett. Noct. pl. 530.
Bryophila calligrapha, *Boisd. Ind. Méth.* 96, 731. *Dup. Cat.*
Euthales calligrapha, *Hübner. Verz. Schmett.* 205, 2062.
a, b. Europe. From M. Becker's collection.

11. BRYOPHILA PERLA.

Alba; alæ anticæ strigis costalibus, litura basali, maculis duabus discalibus, lineis transversis undulatis guttisque exterioribus nigris, margine cinerascens; posticæ fascia margineque cinerascens.

- Noctua Perla*, *Wien. Verz.* 70, 3. *Fabr. Mant. Ins.* ii. 173, 251;
Ent. Syst. iii. 2, 104, 310. *Esp. Eur. Schmett.* pl. 77, f. 2.
Haw. Lep. Brit. 119, 203. *Hübner. Eur. Schmett. Noct.* pl. 5,
 f. 25.
Phalæna-Noctua Perla, *Gmel. ed. Syst. Nat.* i. 5, 2563, 1127.
Noctua glandifera, *Bork. Eur. Schmett.* iv. 128, 52.
Noctua lithophila, *Scriba, Ins. Gesch.* iii. 262, pl. 18.
 ———, *Engr. Pap. d'Eur.* 321, a—d.
Metachrostis Perla, *Hübner. Verz. Schmett.* 204, 2057.

Bryophila perla, *Treit. Schmett. Eur.* v. 1, 61, 3; *Suppl. Dup. Hist. Nat. Lép. Fr.* vi. 210, pl. 86, f. 4. *Steph. Ill. Brit. Ent. Haust.* iii. 45, 2; *Cat. Brit. Lep.* 107, 2. *Frey. Neu. Beit. Schmett.* i. pl. 70. *Guén. Ann. Soc. Ent. Fr.* iii. 195; 1835, 123; *Noct.* i. 28. *Boisd. Ind. Méth.* 96, 726. *Westw. and Humph. Brit. Moths*, i. 199, pl. 41, f. 10. *Herr.-Schæff. Eur. Schmett.* ii. 185, 24.

Bryophila raptricula, *Boisd. Ramb. et Grasl. Icon. Chen.*

Acronyctia Perla, *Meig. Syst. Besch. Eur. Schmett.* iii. 75, 18, pl. 91, f. 11.

a—cc. England. From Mr. Stephens' collection.

dd—hh. England.

ii, jj. Europe. From M. Becker's collection.

12. BRYOPHILA PERLOIDES.

B. Perla paullo major; *palpi magis ascendentes et arcuati*; *alæ anticæ magis oblongæ et apice elongatæ, flavescente aut viridicinereo conspersæ.*

Bryophila perlodes, *Guén. Noct.* i. 29, 30.

Structure of *B. Perla*; markings like those of *B. glandifera*, var. *Par.*

Andalusia.

13. BRYOPHILA GLANDIFERA.

Alba; *palpi et thorax nigro maculati*; *alæ anticæ fasciis duabus cinereis, margine subcinerascete, strigis costalibus, guttis marginalibus, annulis duobus connexis discalibus lineisque transversis angulosis nigris*; *posticæ fasciis duabus exterioribus cinerascetibus.*

———, *Engr. Pap. d'Eur.* pl. 332, a—d.

Noctua glandifera, *Wien. Verz.* 70, 2. *Hübner. Eur. Schmett. Noct.* pl. 5, f. 24; *Larv. Lep.* iv. *Noct.* i. *Bomb. C, c*, f. 2. *Frey. Neu. Beitr. Schmett.* i. pl. 70.

Noctua Lichenis, *Fabr. Sp. Ins.* ii. 235, 127; *Mant. Ins.* ii. 173, 252; *Ent. Syst.* iii. 4, 104, 312. *Esp. Schmett.* iv. pl. 118, f. 8. *Bork. Eur. Schmett.* iv. 130, 53. *Haw. Lep. Brit.* 118, 203.

Phalæna-Noctua Lichenis, *Gmel. ed. Syst. Nat.* i. 5, 2563, 1128. *Stew. El. Nat. Hist.* ii. 188. *Turt. Syst. Nat.* iii. 330. *Donov. Nat. Hist. Brit. Ins.* vii. pl. 223, f. 3.

Bryophila glandifera, [Treit. Schmett. Eur. vi. 58, 1; Suppl. Boisd. Ind. Méth. 96, 725. Guén. Ess. 236; Noct. i. 29, 31. Steph. Ill. Brit. Ent. Haust. iii. 44, 1; Cat. Brit. Lep. 107, 1. Westw. & Humph. Brit. Moths, i. 199, pl. 41, f. 10. Herr.-Schæff. Eur. Schmett. ii. 185, 25.

Bryophila Lichenis, Dup. Hist. Nat. Lép. Fr. vi. 207, pl. 86, f. 1—3.

Pœcilia glandifera, Hübn. Verz. Schmett. 204, 2055.

Acronyctia glandifera, Meig. Syst. Besch. Eur. Schmett. iii. 74, 17, pl. 91, f. 10.

Var. *Alæ anticæ viridi-cinerea, lineis obscurioribus albido marginatis, guttis costalibus nigris; posticæ fuscescentes fascia tenui obscuriore, basi albidæ.*

Noctua par, Hübn. Eur. Schmett. Noct. pl. 515.

Bryophila par, Treit. Schmett. Eur. i. 60; Suppl.

Metachrostis par, Hübn. Verz. Schmett. 204, 2056.

a. England (Devonshire). Presented by W. R. H. Jordan, Esq.

b—o. England. From Mr. Stephens' collection

q—u. England.

w—ee. Europe. From M. Becker's collection.

ff. France.

gg. ———? From Mr. Milne's collection.

North America.

14. BRYOPHILA NANA.

Mas. *Obscure fusca; alæ anticæ strigis transversis irregularibus apicebusque cano-cinereis; posticæ marginibus pallide fuscis.*

Cryphia nana (*Noctua bombycoides*, *Jaspidia nubila*), Hübn. Zeitr. Samml. Exot. Schmett. i. 14, 27, f. 53, 54; Verz. Schmett. 205, 2067.

Georgia, Florida.

15. BRYOPHILA PALLIATRICULA.

Cinereo-fusca; alæ anticæ plaga maxima discali alba maculaque parva subcostali fusca; posticæ pallidæ cinereæ.

Bryophila palliaticula, Guén. Noct. i. 26, 26.

a, b. New York. Presented by E. Doubleday, Esq.

16. BRYOPHILA TERATOPHORA.

Ferrugineo-fusca ; abdomen cinereum ; alæ anticæ lineis transversis nigris, plaga discali maculisque duabus approximatis albidis ; posticæ cinereæ, macula discali fasciisque duabus obscurioribus.

Bryophila teratophora, Herr.-Schæff. *Lep. Exot.* f. 213.
Tennessee.

17. BRYOPHILA CORTICOSA.

B. glandiferæ magnitudine ; corpus sat robustum ; antennæ longæ ; abdomen sabbtus album ; alæ anticæ validæ, squamosæ, albo-viridi nigro fuscoque variæ, lineis maculaque apud marginem internum nigris, ciliis albis nigro signatis ; posticæ albæ, margaritaceæ, plaga apud angulum internum nigricante.

Bryophila corticosa, Guén. *Noct.* i. 30, 32.
North America.

18. BRYOPHILA DISCITINCTA.

Fusco-cinerea ; thorax fascia cana ; abdomen pallide cinereum ; alæ anticæ fasciis angustis undulatis canis fusco marginatis, disco ex parte fusco, macula discali obliqua cana ; posticæ pallide cinereæ.

Brownish cinereous. Thorax with a hoary band. Abdomen and hind wings pale cinereous. Fore wings with slender undulating hoary bands, which have brown borders, and with an oblique hoary spot in the disk, which is partly brownish. Length of the body 6 lines ; of the wings 14 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

19. BRYOPHILA DISCIVARIA.

Pallide cinerea ; alæ anticæ obscuriores, plaga postica, fasciis angustis maculaque discali reniformi albidis.

Var. β . *Alæ anticæ cinereæ, fere unicolores, maculis fasciisque subobsoletis.*

Pale cinereous. Fore wings darker, mostly whitish about the basal half of the interior border, with slender undulating whitish bands, and with a whitish discal spot, which is contracted in the middle. Length of the body 5—6 lines; of the wings 12—14 lines.

Var. β. Fore wings cinereous, almost of one colour, the bands and the spots being nearly obsolete.

a, b. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

20. BRYOPHILA DISCINIGRA.

Cinerea; thorax fasciis nigricantibus; alæ anticæ nigricantes, basi et apud marginem exteriorem canæ, necnon cano signatæ et bimaculatæ; posticæ canæ.

Cinereous. Thorax with blackish bands. Fore wings blackish, hoary at the base and along the exterior border; some intermediate marks and two discal spots also hoary, the outer spot curved, larger than the other. Hind wings hoary. Length of the body $6\frac{1}{2}$ lines; of the wings 15 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Genus 2. GRAMMOPHORA.

Corpus gracile aut sat gracile. Proboscis breviuscula. Palpi porrecti, caput paullo superantes; articulus 3us longi-conicus. Antennæ simplices, corporis dimidio non longiores. Abdomen alas posticas perpaullo superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore subobliquo.

Grammophora, Guén. Noct. i. 30.

Polygrammate et Cerma, Hübn. Samml. Exot. Schmett.; Verz; Schmett. 203, 207.

Body slender or rather slender. Proboscis rather short. Palpi porrect, extending a little beyond the head; third joint elongate-conical. Antennæ simple, about half the length of the body. Abdomen extending very little beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings rather broad. Fore wings nearly straight in front, rounded at the tips, slightly oblique along the exterior border.

1. GRAMMOPHORA HEBRÆA.

Albida ; abdomen pallide fuscum ; alæ anticæ strigis undulatis guttisque nigris ; postica pallide fusca, marginibus latis obscurioribus.

Polygrammate hebraicum (Noctua bombycoides, Diphthera vilis), *Hübner. Samml. Exot. Schmett. i. 10, 13, f. 25, 26 ; Verz. Schmett. 203, 2052.*

Grammophora hebræa, *Guén. Noct. i. 31, 33.*

Georgia, Florida.

a. ——— ?

2. GRAMMOPHORA CORA.

Cinerea ; alæ anticæ fusca, basi fasciæque media latissima albidis lineolis angulosis ocellisque nigris inscriptis, apices versus lineolis transversis angulosis nigris guttulisque albis ; posticæ macula discali marginibusque latis nigricantibus.

Cerma Cora (Noctua genuina, Miselia distincta), *Hübner. Samml. Exot. Schmett. i. 14, 30, f. 59, 60 ; Verz. Schmett. 207, 2073.*

Grammophora Cora, *Guén. Noct. i. 31, 34.*

Georgia, Florida.

a, b. North America. From Mr. Milne's collection.

c. ——— ?

3. GRAMMOPHORA TRISIGNATA.

Albida ; alæ anticæ albæ, guttis nonnullis lineisque plurimis transversis angulosis nigris ocelloque discali signatæ, maculis tribus rotundis cervinis ornatae ; posticæ fusco-cinereæ, basi albida.

Whitish. Fore wings white, thinly sprinkled with black dots. and adorned with many transverse angular black lines ; also with three round fawn-coloured spots, one spot on the costa near the base, the second near the tip of the costa, the third above the interior angle and near the exterior border ; a black incomplete ocellus in the disk. Hind wings brownish cinereous, whitish at the base, and with whitish borders, the latter with lunate brown marks. Length of the body $5\frac{1}{2}$ lines ; of the wings 14 lines.

a, b. Orilla, West Canada. From Mr. Bush's collection.

Fam. 3. BOMBYCOIDÆ.

Corpus robustum aut gracile. Proboscis longa aut nulla. Palpi nonnunquam ascendentes; articulus 3us minimus aut elongatus. Antennæ simplices, *maris* rarissime pectinatæ. Pedes sæpissime validi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ aut latiusculæ, rarissime elongatæ.

Bombycoides, p. et Caradrinides, p., *Boisd. Ind. Méth.* 94.

Bombycoidæ, *Guén. Noct.* i. 33.

Bombycoides Apatelæ et Diphtheræ, *Hübner. Verz. Schmett.*

Bombycoidi, *Boisd. Ind. Méth.* ed. 1, 60. *Steph. Cat. Brit. Lep.* 114.

Bombycoidæ, p., et Liparides, p., *Herr.-Schæff. Eur. Schmett.* ii. 130, 173.

Body stout, rather slender in some species. Proboscis long, occasionally very short or obsolete. Palpi sometimes ascending; third joint rarely elongated. Antennæ of the male very rarely pectinated. Abdomen generally extending a little beyond the hind wings. Legs somewhat stout; hind tibiæ with four long spurs. Wings broad or rather broad, very rarely narrow and elongated.

A. Abdomen apice tantum villosum. - 1. MICROCÆLIA, *Guén.*

B. Abdomen villosum.

A. Proboscis brevis. - - - - 2. DIPHTERA, *Ochs.*

B. Proboscis longa. - - - - 3. ACRONYCTA, *Ochs.*

C. Proboscis nulla aut subobsoleta. - - 4. SIMYRA, *Ochs.*

Genus 1. MICROCÆLIA.

Corpus gracile. Proboscis breviuscula. Palpi sat graciles, oblique ascendentes, caput paullo superantes; articulus 3us lanceolatus, 2i dimidio brevior. Antennæ simplices, graciles, corporis dimidio non longiores. Abdomen alas posticas vix superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriori subobliquo.

Microcælia, *Guén. Noct.* i. 3.

Body slender. Proboscis rather short. Palpi rather slender, obliquely ascending, extending a little beyond the head; third joint lanceolate, less than half the length of the second. Antennæ

simple, slender, about half the length of the body. Abdomen hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings almost straight in front, rounded at the tips, slightly oblique along the exterior border.

1. MICROCÆLIA FRAGILIS.

Albida; caput et thorax nigro fasciata; alæ anticæ apud discum subfuscescentes, lineis transversis angulosis, guttis marginalibus, macula postica annulisque duobus discalibus nigris.

Microcælia fragilis, Guén. Noct. i. 34, 35.

a. New York. Presented by E. Doubleday, Esq.

2. MICROCÆLIA DIPHTEROIDES.

Albida; alæ anticæ lineis transversis angulosis interruptis, maculis costalibus, guttis marginalibus maculaque subquadrata discali nigris.

Var. β . *Alæ anticæ lineis guttisque obsoletis.*

Microcælia diphteroides, Guén. Noct. i. 34, 36.

a—d. Trenton Falls, New York. Presented by E. Doubleday Esq.

Genus 2. DIPHTERA.

Corpus plus minusve robustum aut sat gracile. Proboscis brevis aut breviuscula. Palpi nonnunquam ascendentes; articulus 3us brevissimus aut elongatus. Antennæ *maris* nonnunquam pectinatae. Abdomen alas posticas non aut paullo superans. Pedes validi, aut sat validi; tibiæ posticæ calcaribus quatuor longis aut longiusculis. Alæ anticæ latiusculæ aut sat angustæ, margine exteriori subobliquo aut sat obliquo.

Diphtera, Ochs.; *Treit.*; *Boisd.*; *Guén.*; *Steph.*

Moma, p., *Pœcilia*, p., et *Panthea*, Hübn. *Verz. Schmett.* 203, 204.

Diphtera et *Elatina*, *Duponch.*

Moma, *Diphthera*, et *Lælia*, Herr.-Schæff. *Eur. Schmett.* ii. 175, 176.

Body more or less stout or rather slender. Proboscis short or rather short. Palpi ascending or horizontal; third joint elongated

or very short. Antennæ simple or slightly pectinated in the male. Abdomen extending as far as the hind wings or a little beyond. Legs stout or rather stout; hind tibiæ with four long or rather long spurs. Wings not or rather broad, somewhat long in one species.

Europe.

Group 1.

Corpus vix robustum. Proboscis breviuscula. Palpi oblique ascendentes; articulus 3us minutus, brevis, conicus. Antennæ simplices, sat validæ. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apice subrotundatæ, margine exteriori subobliquo.

Moma, p., Hübn.

Diphthera, Herr.-Schæff.

Body hardly stout. Proboscis rather short. Palpi obliquely ascending; third joint minute, conical, not one-fourth of the length of the second. Antennæ simple, moderately stout. Abdomen extending as far as the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings rather broad. Fore wings almost straight in front, somewhat rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins almost contiguous at the base; fourth moderately remote.

1. DIPHTERA LUDIFICA.

Alba; thorax nigro trifasciatus; abdomen luteum, maculis dorsalibus et lateralibus apiceque nigris albo-cinctis; alæ anticæ lineis transversis interruptis angulosis annuloque discali nigris; posticæ cinereæ, antice albidæ, margine interiore lutescente, guttis marginalibus nigris.

Phalæna-Noctua ludifica, Linn. Syst. Nat. i. 2, 848, 143; Faun. Suec. 1177. Gmel. ed. Syst. Nat. i. 5, 2562, 143. Turt. Syst. Nat. iii. 329.

———, Engr. Pap. d'Eur. pl. 323.

Noctua ludifica, Wien. Verz. 311, 8. Fabr. Sp. Ins. ii. 235, 126; Mant. Ins. ii. 173, 249; Ent. Syst. iii. 2, 103, 309. Naturf. 1780, pl. 3, f. A. Esp. Schmett. iv. pl. 120, f. 1, 2. Bork. Eur. Schmett. iv. 137, 55. Hübn. Samml. Eur. Schmett. Noct. f. 580, 581; Larv. Lep. iv. Noct. i. Bomb. C, b, f. 2.

Dipthera ludifica, *Treit. Schmett. Eur.* v. 1, 50, 2. *Frey. Neu. Beit. Schmett.* pl. 63. *Dup. Hist. Nat. Lép. Fr.* vi. 190, pl. 85, f. 6. *Boisd. Ind. Méth.* 95, 723. *Guén. Ess.* 236; *Noct.* i. 36, 38. *Steph. Ill. Brit. Ent. Haust.* iii. 46, 1. *Richter, Ent. Zeit. Stett.* iii. 165. *Herr.-Schæff. Eur. Schmett.* ii. 176, 3.

Moma ludifica, *Hüb. Verz. Schmett.* 203, 2049.

Acronyctia ludifica, *Meig. Syst. Besch. Eur. Schmett.* iv. 73, 16, pl. 92, f. 1.

a—e. Europe. From M. Becker's collection.

Group 2.

Corpus sat gracile. Proboscis breviuscula. Palpi ascendentes; articulus 3us cylindricus, gracilis, 2i dimidio non brevior. Antennæ graciles. Abdomen alas posticas non superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ.

Pæcilia, p., *Hüb.*

Body rather slender. Proboscis rather short. Palpi ascending; third joint cylindrical, slender, about half the length of the second. Antennæ slender. Abdomen extending as far as the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings like those of the first group.

2. DIPHTERA ORION.

Viridis; thorax nigro bifasciatus; abdomen canum, e maculis nigris trivittatum; alæ anticæ vittis albis, fasciis duabus angulosis liturisque duabus discalibus nigris, guttis submarginalibus albo-nigris; posticæ subcinereæ, margine obscuriore, fasciis duabus late interruptis nigricantibus.

Phalæna-Noctua runica, *Gmel. ed. Syst. Nat.* i. 5, 2560, 1123.

———, *Engr. Pap. d'Eur.* pl. 325. *Schæff. Icon.* pl. 92, f.

3. *Harr. Aur.* pl. 42, f. e; *V. M.* 19.

Noctua Orion, *Sepp, Ins.* iv. pl. 9, f. 1—8. *Esp. Schmett.* iv. pl. 118, f. 4—7. *Bork. Eur. Schmett.* iv. 132, 54.

Noctua aprilina, *Wien. Verz.* 70, 6. *Fabr. Mant. Ins.* ii. 172, 247; *Ent. Syst.* iii. 2, 103, 306. *Hüb. Eur. Schmett. Noct.* pl. 5, f. 22; *Larv. Lep.* iv. *Noct.* i. *Bomb. C, b,* f. 1.

Dipthera runica, *Steph. Syst. Cat.* 2, 94, 6, 294.

Diphtera Orion, *Treit. Schmett. Eur.* v. 1, 54, 3. *Steph. Ill. Brit. Ent. Haust.* iii. 46, 2; *Cat. Brit. Lep.* 103, 1. *Dup. Hist. Nat. Lép. Fr.* vi. 203, pl. 85, f. 5. *Boisd. Ind. Méth.* 95, 723. *Guén. Ess.* 236; *Noct.* i. 36, 39. *Curt. Brit. Ent.* ix. pl. 404. *Frey. Neu. Beit.* pl. 63; *Alt. Beit.* pl. 22, 70; *Ent. Zeit. Stett.* ii. 92.

Phalæna-Noctua aprilina, *Donov. Nat. Hist. Brit. Ins.* x. 57, pl. 347, f. 1.

Noctua runica, *Haw. Lep. Brit.* 200.

Pæcilia runica, *Hübner. Verz. Schmett.* 204, 2054.

Acronyctia Orion, *Meig. Handb.* 152, 11, pl. 12, f. 5; *Syst. Besch. Eur. Schmett.* iii. 72, 14, pl. 91, f. 8.

Moma Orion, *Herr.-Schæff. Eur. Schmett.* ii. 176, 2.

a—d. England. From Mr. Stephens' collection.

e—h. England.

i—p. Europe. From M. Becker's collection.

Group 3.

Corpus mediocriter robustum. Proboscis brevis. Palpi breves, non ascendentes; articulus 3us minimus brevissimus. Antennæ maris pectinatae. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ anticæ apice subrotundatæ, margine exteriori sat obliquo.

Panthea, *Hübner. Verz. Schmett.* 203.

Elatina, *Duponch.*

Lælia, p., *Herr.-Schæff. Eur. Schmett.* ii. 137.

Body moderately stout. Proboscis short. Palpi short, not ascending; third joint very short and minute. Antennæ of the male slightly pectinated. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four rather long spurs. Wings rather long, not broad. Fore wings somewhat rounded at the tips, rather oblique along the exterior border; first and second inferior veins contiguous at the base; third joint near the second; fourth remote.

D. cænobita may perhaps be separated from *Diphtera*, being very different from the first and second groups, which are closely allied to each other.

3. DIPHTERA CÆNOBITA.

Alba; thorax fascia antica maculis lateralibus vittisque duabus intermediis nigris; abdomen disco nigricante, maculis lateralibus nigris; alæ anticæ fasciis tribus angulosis et ramosis guttis nigris; posticæ cinerascens, venis margineque obscurioribus, ciliis albis.

Bombyx cænobita, *Esp. Schmett.* iii. pl. 37, f. 7; pl. 82, f. 2
Bork. Eur. Schmett. iii. 311, 117. *Hübner. Eur. Schmett.*
Bomb. pl. 19, f. 72, 73; *Larv.*

Noctua Cænobita, *Hübner. Eur. Schmett.* *Noct.* pl. 109, f. 508;
Larv. Lep. iv. *Noct.* i. *Bomb.* C, a, b, f. a—c; *Lep.* iii.
Bomb. ii. *Veræ*, C, c, f. 1.

Noctua Panthea, *Fabr. Ent. Syst. Suppl.* 309, 447.

———, *Engr. Pap. d' Eur.* pl. 184.

Diphtera cænobita, *Treit. Schmett. Eur.* v. 1, 48; *Suppl.* x. 9.
Dup. Hist. Nat. Léop. Fr. vii. 257, pl. 116, f. 4. *Boisd. Ind.*
Méth. 95, 722. *Guén. Noct.* i. 37, 41. *Frey. Neu. Beit.*
Schmett. iii. 51, pl. 17; *Ent. Zeit. Stett.* ii. 91.

Acronyctia cænobita, *Meig. Syst. Besch. Eur. Schmett.* iii. 73, 16,
 pl. 92, f. 1.

Panthea cænobita, *Hübner. Verz. Schmett.* 203, 2047.

Elatina cænobita, *Duponch.*

a—c. Europe. From M. Becker's collection.

North America.

Group 1.

Like the second European group.

4. DIPHTERA FALLAX.

Pallide viridis; thorax vittis duabus abbreviatis nigris albo marginatis; abdomen cinereum, maculis dorsalibus trigonis obscurioribus; alæ anticæ fasciis macularibus nigris albo marginatis; posticæ cinereæ, macula discali fasciæque obscurioribus.

Moma fallax, *Herr.-Schæff. Lep. Exot.* f. 211.

Diphtera Orion, var. ?

Tennessee.

Group 2.

Proboscis brevis. Palpi brevissimi; articulus 3us minimus. Antennæ graciles, simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori sat obliquo.

Proboscis short. Palpi very short; third joint very small. Antennæ slender, simple, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout, pilose; hind tibiæ with four short spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, rather oblique along the exterior border.

5. DIPHTERA JOCOSA.

Pallide cervina; thorax fasciis albo-nigris; abdomen vitta nigra albido maculata; alæ anticæ fasciis angulatis maculisque nonnullis albo-nigris; posticæ nigricantes, ciliis albidis.

Var. β . *Thorax cervino-albidus; alæ anticæ albidæ, punctis fasciisque duabus latis (1a diffusa) nigris.*

Diphtera jocosa, Guén. Noct. i. 37, 40.

a, b. New York, North America. Presented by E. Doubleday, Esq.

Group ?

6. DIPHTERA DERIDENS.

Mas. *Cinereo-albida; palpi breves, extus fusci, apice albi; antennæ breves, pectinatæ; thorax cinereo nigroque varius; alæ anticæ flavo tinctæ, lineis flexuosis lunulisque marginalibus nigricantibus, ocelli discalis pupilla fusca; posticæ apud margines albidæ, lunulis nigricantibus.*

Diphtera deridens, Guén. Noct. i. 35, 37.

North America.

Mexico.

Group 1.

Corpus robustum. Proboscis brevis. Palpi brevissimi; articulus 3us minimus. Antennæ simplices, sat validæ, corporis dimidio non longiores. Pedes validi; tibiæ posticæ calcaribus parvis. Alæ angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori perobliquo.

Body stout. Proboscis short. Palpi very short; third joint very small. Antennæ simple, rather stout, about half the length of the body. Legs stout; hind tibiæ with four short spurs. Wings narrow. Fore wings straight in front, rounded at the tips, very oblique along the exterior border.

7. DIPHTERA CAVILLATOR.

Alba; thorax nigro maculatus; alæ anticæ lineis transversis obliquis undulosis interruptis duplicatis annulisque duobus connexis discalibus nigris, disco ex parte cinerascens, ciliis nigro guttatis; posticæ nigræ, ciliis albis linea nigra.

White. Thorax with black spots. Fore wings with black transverse oblique undulating interrupted double lines, and with two connected black discal ringlets; disk partly grayish; fringe with black dots. Hind wings blackish; border white, with a black line. Length of the body 7 lines; of the wings 18 lines.

a. Mexico. Presented by E. Doubleday, Esq.

South America.

Group 1.

Antennæ graciles, corporis dimidio paullo longiores.

Characters of the preceding group. Antennæ slender, rather more than half the length of the body.

8. DIPHTERA ILLUDENS.

Alba; caput, palpi et thorax nigro maculata; alæ anticæ nigro conspersæ et subfasciatæ, litura guttaque discalibus albis.

White. Head, palpi and thorax with black spots. Fore wings with numerous black specks, some of which are confluent, and form

incomplete oblique bands, one of the bands including a white mark and a white dot in the disk. Length of the body 6—8 lines; of the wings 22—24 lines.

a, b. Venezuela. From Mr. Dyson's collection.

South America.

DIPHTERA ENCELADA.

Fusco-alba; alæ anticæ fuscae, apud marginem exteriorem albido nigroque variae, fascia latissima alba-nigro marginata fusco-nigroque maculata; posticæ glaucæ cervino marginatae, fasciis duabus maculisque marginalibus nigris.

Phalæna Encelada, Cram. Pap. Exot. ii. 130, pl. 181, f. F.

Surinam.

Country unknown.

Group 1.

Corpus crassum, aut sat robustum. Proboscis breviuscula. Palpi brevissimi. Antennæ simplices, corporis dimidio non longiores. Abdomen alas posticas non superans. Pedes validi; tibiæ posticæ calcaribus quatuor parvis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam subconvexæ, apice rotundatæ, margine exteriori sat obliquo.

Nearly allied to the *Bombycites*, as are also the two preceding groups. Body thick or rather stout. Proboscis rather short. Palpi extremely short. Antennæ simple, about half the length of the body. Abdomen extending as far as the hind wings. Legs stout; hind tibiæ with four short spurs. Wings moderately broad, rather long. Fore wings slightly convex in front, rounded at the tips, rather oblique along the exterior border.

8. DIPHTERA SAGATA.

Alba, crassa; caput subtus et pectus antice nigra; abdomen lateribus ochraceis, fasciis ventree nigris; alæ anticæ ex parte cervinæ, fasciis angustis obliquis angulosis maculisque marginalibus nigris; posticæ fulvæ, nigro bifasciatæ, apud margines albidæ.

White, thick. Head beneath and fore part of the pectus black. Abdomen with irregular black bands; sides orange-tawny;

under side and tarsi black. Fore wings partly tinged with fawn-colour, which is brightest towards the base, adorned with black slender irregular oblique angular bands, with black costal marks, and with black marginal spots; two little ringlets in the disk. Hind wings tawny, with two black bands, whitish towards the borders. Length of the body 11 lines; of the wings 34 lines.

Pupa clothed with ferruginous hairs.

a. ———?

9. DIPHTERA BIVARIA.

Mas. *Alba, sat robusta; thorax nigro maculatus; alæ anticæ fasciis duabus obliquis abbreviatis cinereis, lineolis plurimis variis, annulis costalibus incompletis annulisque duabus connexis discalibus optime determinatis nigris; posticæ fasciis duabus nigricantibus, disco ex parte cinereo.*

Male. White, rather stout. Thorax with black spots. Fore wings with two gray oblique abbreviated bands, with various short black streaks, with incomplete black costal ringlets, and with two connected very distinct discal ringlets. Hind wings with two blackish bands; the disk partly gray. Length of the body 8 lines; of the wings 26 lines.

In Mr. Saunders' collection.

Note.—Guénée's genus *Prometopus* does not seem to be allied to *Diphtera*, but rather to the second division of *Noctuities*, or, as he remarks, to the *Notodontidæ*.

The genus *Colocasia* which follows *Prometopus* in Guénée's arrangement, is noticed in this Catalogue, 1st Series, p. 787.

The following references are added:—

1. OXICESTA GEOGRAPHICA.

—————, *Engr. Pap. d'Eur.* pl. 174, bis a—d.

Noctua geographica, *Fabr. Mant. Ins.* ii. 167, 216; *Ent. Syst.* iii. 271. *Bork. Eur. Schmett.* 84.

Phalæna-Noctua geographica, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1179.

Bombyx austera, *Scriba, Beit. Ins.* 176, pl. 7, f. 5; *Esp. Schmett.* pl. 191. *Bork. Eur. Schmett.* 166.

- Bombyx sericina*, *Hübner. Eur. Schmett. Bomb.* 7, 259. *Beitr.* ii. pl. 4, y.
Gastropacha geographica, *Treit. Schmett. Eur. Bomb.* 47; *Suppl.* x. 198.
Lasiocampa geographica, *Meig. Syst. Besch. Eur. Schmett.* ii. 708, 18, pl. 80, f. 2.
Clidia geographica, *Boisd. Ind. Méth.* 68, 562. *Dup. Hist. Nat. Léop. Fr.* iii. 184, pl. 84. *Herr.-Schæff. Eur. Schmett.* ii. 177.
Colocasia geographica, *Guén. Ind.* 235; *Noct.* i. 39, 43.

OXICESTA CHAMÆSYCES.

- Clidia geographica*, *Boisd. Ramb. Grasl. Chen. d'Eur. Boisd. Icon.*
Colocasia Chamæsyces, *Guén. Noct.* i. 40, 44.
Oxicesta geographica, *var.?*
 South France.

Genus 3. ACRONYCTA.

Corpus robustum. Proboscis brevis. Palpi pilosi, subscendentes, caput superantes; articulus 3us lanceolatus, 2i dimidio vix brevior. Antennæ simplices, sat graciles. Abdomen alas posticas perpaullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subangulatæ, margine exteriori mediocriter obliquo.

Acronycta, *Ochs. Syst. Gloss.*; *Treit.*; *Boisd.*; *Duponch.*; *Herr.-Schæff.*

Triæna, *Arctomyzæ*, *Hyboma*, *Jocheæra*, *Polymixis*, p., et *Pharetra*, *Hübner. Verz. Schmett.* 200—202, 205.

Triæna, *Acronycta* et *Apatela*, *Steph. Cat. Brit. Lep.* 104—106.

Acronyctia, p., *Meigen.*

Body stout. Proboscis short. Palpi pilose, slightly ascending, extending some distance beyond the head; third joint lanceolate, nearly half the length of the second. Antennæ simple, rather slender. Abdomen extending very little beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, somewhat angular at the tips, moderately oblique along the exterior border; second inferior vein about four times further from the third than from the first.

Europe.

Group 1.

Alæ anticæ litura ψ signatæ.

Triæna, Hübn.

Semaphora, Guén. olim.

Fore wings with a mark resembling the letter ψ .

1. ACRONYCTA TRIDENS.

Cana aut cinerea ; abdomen albidum ; alæ anticæ striga tridentata basali, litura ψ discali lineisque duabus barbatis exterioribus nigris ; posticæ cinereo-fuscæ aut albidæ.

———, Roës, *Ins. Bel.* i. pl. 8. *Engr. Pap. d'Eur.* 287, a, e. Albin, *Nat. Hist. Engl. Ins.* pl. 86, f. . Harr. *V. M.* 19.

Phalæna-Noctua tridens, *Gmel. ed. Syst. Nat.* i. 5, 2553, 1130.

Noctua tridens, *Wien. Verz.* 67, 1. *Fabr. Mant. Ins.* ii. 173, 254 ; *Ent. Syst.* iii. 2, 105, 314. *Haw. Lep. Brit.* 181. *Sepp, Ins.* ii. pl. 22. *Esp. Schmett.* iv. pl. 115, f. 5—8. *Bork. Eur. Schmett.* iv. 244, 107.

Noctua Psi, Hübn. *Eur. Schmett. Noct.* pl. 1, f. 5 ; *Larv. Lep.* iv. *Noct. i. Bomb. B, b, f. 2, a.*

Acronycta tridens, *Treit. Schmett. Eur.* v. 1, 26, 8. *Dup. Hist. Nat. Léop. Fr.* vi. 222, pl. 87, f. 2. *Steph. Ill. Brit. Haust.* iii. 40, 6. *Herr.-Schæff. Eur. Schmett.* ii. 181, 11. *Boisd. Ind. Méth.* 94, 713. *Guén. Noct.* i. 43, 46. *West. & Humph. Brit. Moths,* i. 198, pl. 42, f. 7, 18.

Triæna tridens, Hübn. *Verz. Schmett.* 201, 2031. *Steph. Cat. Brit. Lep.* 104, 2.

Acronyctia tridens, *Meig. Handb.* 149, 5 ; *Syst. Besch. Eur. Schmett.* iii. 70, 10, pl. 90, f. 10.

Semaphora tridens, *Guén. Ess. Ann. Soc. Ent. Fr.* vi. 235.

a—n. England. From Mr. Stephens' collection.

o—t. England.

v—x. Europe. From M. Becker's collection.

2. ACRONYCTA PSI.

Cana aut cinerea ; abdomen albidum ; alæ anticæ striga tridentata basali, litura ∟ discali lineisque duabus barbatis exterioribus nigris ; posticæ cinereo-fuscæ aut albidæ.

- , *Göed. Ins.* i. pl. 22. *List. Göed.* f. 92. *Ray, Ins.* 350. *Réaum. Ins.* i. pl. 42, f. 5, 6. *Merian, Ins. Eur.* iii. pl. 42. *Frisch, Ins.* ii. pl. 2. *Ammir. Ins.* pl. 13. *Roës. Ins. Bel.* i. pl. 7. *Geoff. Ins. Par.* 155. *Wilk.* 28, pl. 60. *Engr. Pap. d'Eur.* 286, a—c. *Albin, Nat. Hist. Engl. Ins.* pl. 80. *Harr. A.* pl. 15 ; *V. M.* 19.
- Phalæna-Noctua Psi, *Linn. Syst. Nat.* i. 2, 846, 135 ; *Faun. Suec.* 1181. *Gmel. ed. Syst. Nat.* i. 5, 2559, 135. *Berk. Syn.* i. 141. *Donov. Nat. Hist. Brit. Ins.* iv. pl. 133. *Stew. El.* ii. 187. *Turt. Syst. Nat.* iii. 330.
- Noctua Psi, *Wien. Verz.* 67, 2. *Fabr. Sp. Ins.* ii. 235, 129 ; *Mant. Ins.* ii. 174, 255 ; *Ent. Syst.* iii. 2, 105, 315. *Esp. Schmett.* iv. pl. 115, f. 1, 2. *Bork. Eur. Schmett.* iv. 238, 106. *Haw. Lep. Brit.* 181. *Frey. Neu. Beit. Schmett.* i. pl. 58.
- Acronycta Psi, *Treit. Schmett. Eur.* v. 1, 30, 9. *Dup. Hist. Nat. Léop. Fr.* vi. 218, pl. 83, f. 1. *Steph. Ill. Brit. Ent. Haust.* iii. 39, 5. *Guén. Noct.* i. 43, 47. *Boisd. Ind. Méth.* 94, 714. *Herr.-Schæff. Eur. Schmett.* ii. 181, 12. *Westw. & Humph. Brit. Moths,* i. 198, pl. 41, f. 5 ; pl. 42, f. 116.
- Triæna Psi, *Hüb. Verz. Schmett.* 200, 2029. *Steph. Cat. Brit. Lep.* 104, 1.
- Acronyctia Psi, *Meig. Handb.* 149, 4 ; *Syst. Besch. Eur. Schmett.* iii. 69, 9, pl. 90, f. 9.
- Semaphora Psi, *Guén. Ess.* 235.
- Noctua tridens, *Sepp, Ins.* iv. pl. 4. *Hüb. Eur. Schmett. Noct.* pl. 1, f. 4 ; *Larv. Lep.* iv. *Noct.* i. *Bomb. B,* b, f. b, c.
- Var.* Acronycta Cuspis, *Steph. Ill. Brit. Ent. Haust.* iii. 40, 7.
- a. England. Presented by H. Doubleday, Esq.
b—t. England. From Mr. Stephens' collection.
v—z. England.
aa—ee. Europe. From M. Becker's collection.
ff, gg. France.
hh. ——— ? From Mr. Milne's collection.
ii—pp. New York. Presented by E. Doubleday, Esq.

The American *A. Psi* has a slight testaceous tinge on the fore wings ; the markings also are somewhat different from those of the European *A. Psi*, and it may be a distinct species.

3. ACRONYCTA CUSPIS.

Cana; abdomen cinereo-albidum; alæ anticæ maculis costalibus, striga tridentata basali, litura √ incompleta discali, fascia tenui exteriori lineaque una barbata postica nigris; posticæ cinereo-fuscescentes.

- , *Engr. Pap. d'Eur.* 287, d.
Noctua Psi, *Hübner. Samml. Eur. Schmett.* 504. *Frey. Neu. Beit. Schmett.* i. pl. 57.
Acronycta Cuspis, *Treit. Schmett. Eur.* i. 32; *Suppl.* 4. *Dup. Hist. Nat. Léop. Fr. Suppl.* iii. 150, pl. 15. *Boisd. Icon.* pl. 71; *Ind. Méth.* 94, 715. *Guén. Noct.* i. 43, 48. *Herr.-Schæff. Eur. Schmett.* ii. 181, 13.
Semaphora Cuspis, *Guén. Ess.* 235.
Triæna Cuspis, *Hübner. Verz. Schmett.* 200, 2030.
a—c. Europe. From M. Becker's collection.
d, e. ———?

Group 2.

Color albus; alæ anticæ punctis liturisque costalibus et discalibus guttisque marginalibus nigris.

Apatela, *Steph.*

Colour white. Fore wings with black costal and discal points and marks, and with black marginal dots.

4. ACRONYCTA LEPORINA.

Alba; alæ anticæ guttis costalibus et marginalibus lineolisque nonnullis discalibus plus minusve angulatis nigris.

- , *Deg. Ins.* i. 210; ii. 411, pl. 12. *Engr. Pap. d'Eur.* 296, a—d.
Phalæna-Noctua leporina, *Linn. Syst. Nat.* i. 2, 109. *Faun. Suec.* 1176. *Donov. Nat. Hist. Brit. Ins.* pl. 327.
Noctua leporina, *Wien. Verz.* 67, 8. *Esp. Schmett.* iv. pl. 91, f. 1—5. *Bork. Eur. Schmett.* iii. 303, 103. *Hübner. Samml. Eur. Schmett. Noct.* pl. 3, f. 15. *Haw. Lep. Brit.* 182, 52.
Acronycta leporina, *Treit. Schmett. Eur.* v. 1, 51. *Dup. Hist. Nat. Léop. Fr.* vi. 3, 225, pl. 87, f. 3. *Boisd. Ind. Méth.* 94, 707. *Guén. Noct.* i. 46, 56. *Herr.-Schæff. Eur. Schmett.* ii. 180, 10.

Apatela leporina, *Steph. Ill. Brit. Haust.* iii. 35, 1; *Cat. Brit. Lep.* 106, 2. *Westw. & H. Brit. Moths*, i. 193, pl. 41, f. 1; pl. 42, f. 13.

Acronicta leporina, *Hübner. Verz. Schmett.* 201, 2035.

Bombyx leporina, *Fabr. Sp. Ins.* ii. 191, 94; *Mant. Ins.* ii. 124, 33; *Ent. Syst.* iii. 1, 453, 144. *Fuessl. Ent. Mag.* ii. pl. 1, f. 1. *Turt. Syst. Nat.* iii. 215.

Phalæna-Bombyx leporina, *Gmel. ed. Syst. Nat.* i. 5, 2437, 109.

Noctua Bradyporina, *Hübner. Eur. Schmett. Noct.* pl. 124, f. 570, 571.

Acronyctia leporina, *Meig. Handb.* 148, 1, pl. 12, f. 3; *Syst. Besch. Eur. Schmett.* iii. 65, 1, pl. 90, f. 8.

Var. Acronycta bradyporina, *Treit. Schmett. Eur.* v. 1, 92.

Apatela bradyporina, *Steph. Ill. Brit. Ent. Haust.* iii. 36, 2, pl. 26, f. 3. *Westw. & H. Brit. Moths*, i. 193, pl. 41, f. 4; pl. 42, f. 12.

Noctua leporina, var. *Sepp. Ins.* i. pl. 23. *Hübner. Eur. Schmett. Noct.* pl. 4, f. 16; pl. 124, f. 570, 571. *Larv. Lep. iv. Noct. i. Bomb. B, d, f. 1.*

———, *Engr. Pap. d'Eur.* pl. 296, f. c.

Acronicta bradyporina, *Hübner. Verz. Schmett.* 201, 2036.

Var. Abdomen fasciis roseis; alæ anticæ basi roseæ.

———, *Engr. Pap. d'Eur.* pl. 297, f. a, b.

a—l. England. From Mr. Stephens' collection.

m—q. England.

r—t. Europe. From M. Becker's collection.

v. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Group 3.

Color cinereus. Abdomen pallidum. Alæ anticæ nigro conspersæ, lineis transversis undulatis annuloque discali nigris ornatae; posticæ albæ.

Arctomyscis, p., *Hübner.*

Colour cinereous. Abdomen paler. Fore wings sprinkled with black, adorned with black transverse undulating lines, and with a black discal ringlet. Hind wings white.

5. ACRONYCTA ACERIS.

Cinerea; abdomen canescens maculis dorsalibus obscurioribus; alæ anticæ atomis, lineis tribus transversis duplicatis angulosis annuloque discali nigris; posticæ albæ, strigis marginalibus fuscescentibus.

- , *Albin, Nat. Hist. Eugl. Ins.* pl. 83. *Réaum. Ins.* i. pl. 34, f. 11. *Frisch. Ins.* i. pl. 5. *Wilk.* 32, pl. 67. *Engr. Pap. d'Eur.* 295, a—f. *Harr. V. M.* 47.
- Phalæna-Noctua Aceris, *Linn. Syst. Nat.* i. 2, 846, 137; *Faun. Suec.* 1179. *Scop. Ent. Carn.* 524. *Gmel. ed. Syst. Nat.* i. 5, 2560, 137. *Berk. Syn.* i. 141. *Donov. Nat. Hist. Engl. Ins.* x. 15, pl. 330. *Stew. El. Nat. Hist.* ii. 188. *Turt. Syst. Nat.* iii. 331.
- Noctua Aceris, *Wien. Verz.* 67, 7. *Fabr. Mant. Ins.* ii. 174, 259. *Ent. Syst.* iii. 2, 107, 322. *Esp. Schmett.* iv. pl. 117. (Rumicis erratim); pl. 114, f. 4—7. *Bork. Eur. Schmett.* iv. 202, 102. *Sepp. Ins.* iii. pl. 16. *Hübner. Samml. Eur. Schmett. Noct.* pl. 3, f. 13, 14. *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, c, d, f. 2. *Haw. Lep. Brit.* 176.
- Acronycta Aceris, *Treit. Schmett. Eur.* v. 1, 11, 3. *Dup. Hist. Nat. Léop. Fr.* vi. 253, pl. 88, f. 5. *Guén. Ess.* 235: *Noct.* i. 48, 58. *Boisd. Ind. Méth.* 94, 708. *Herr.-Schæff. Eur. Schmett.* ii. 184, 22.
- Arctomyscis Aceris, *Hübner. Verz. Schmett.* 202, 2041.
- Apatela Aceris, *Steph. Ill. Brit. Ent. Haust.* iii. 36, 3; *Cat. Brit. Lep.* 106, 1. *Westw. & H. Brit. Moths,* i. 194, pl. 41, f. 5, 6; pl. 42, f. 17.
- Acronyctia Aceris, *Meig. Handb.* 151, 10; *Syst. Besch. Eur. Schmett.* iii. 65, 2, pl. 91, f. 2.

Var. *Alæ anticæ obscuriores, plus flavescences, lineis maculisque magis determinatis.*

Noctua candelisequa, *Esp. Schmett.* iv. pl. 191, f. 1.

Acronycta paradoxa, *Boisd. Ind. Méth. ed.* i. 60.

a—i. England. From Mr. Stephens' collections.

j—p. England.

q—s. Europe. From M. Becker's collection.

t, v. France.

Group 4.

Arctomyscis, p., *Hübner*.

Much like the third group as regards the disposition of the colours.

6. ACRONYCTA MEGACEPHALA.

Subrufescente-cinerea; abdomen canescens; alæ anticæ atomis, lineis tribus transversis (duabus duplicatis unaque exteriori simplici) angulosis annuloque discali nigris; posticæ albæ, strigis marginalibus fusciscentibus.

———, *Deg. Ins.* ii. 413, pl. 7, f. 9. *Engr. Pap. d'Eur.* 294, a—d. *Harr. V. M.* 47.

Noctua megacephala, *Wien. Verz.* 67, 5. *Fabr. Mant. Ins.* ii. 175, 261; *Ent. Syst.* iii. 2, 108, 325. *Esp. Schmett.* iv. pl. 65, f. 1. *Bork. Eur. Schmett.* iv. 222, 102. *Sepp. Ins.* iii. pl. 9. *Hübner. Samml. Eur. Schmett. Noct.* pl. 2, f. 10; pl. 3, f. 11. *Larv. Lep.* iv. *Noct.* i. *Bomb. B, c*, f. 2. *Haw. Lep. Brit.* 177.

Acronycta megacephala, *Treit. Schmett.* v. 1, 13, 4. *Dup. Hist. Nat. Léop. Fr.* vi. 3, 244, pl. 88, f. 6. *Steph. Ill. Brit. Haust.* iii. 37, 1. *Cat. Brit. Lep.* 106, 9. *Boisd. Ind. Méth.* 94, 709. *Westw. & H. Brit. Moths*, i. 195, pl. 41, f. 1, 2; pl. 42, f. 16. *Herr.-Schäff. Eur. Schmett.* ii. 184, 23. *Guén. Noct.* i. 49, 62.

Phalæna-Noctua megaloccephala, *Gmel. ed. Syst. Nat.* i. 5, 2560, 1122.

Noctua macrocephala, *Villars, Ent.* ii. 175.

Arctomyscis megacephala, *Hübner. Verz. Schmett.* 202, 2046.

Acronyctia megacephala, *Meig. Handb.* 151, 9; *Syst. Besch. Eur. Schmett.* iii. 66, 3, pl. 90, f. 1.

a—c. England. Presented by H. Doubleday, Esq.

d—p. England. From Mr. Stephens' collection.

q—t. England.

v—x. Europe. From M. Becker's collection.

Group 5.

Alæ anticæ albo nigroque marmoratæ.

Hyboma et Jocheæra, *Hübner*.

Fore wings marbled with black and white.

7. ACRONYCTA STRIGOSA.

Cinerascens; alæ anticæ fusco nebulosæ, vitta interrupta posteriore annulo discali guttisque marginalibus nigris, fasciis angulosis albis nigro marginatis, macula discali testacea ex parte nigro marginata, posticæ albidæ, linea margineque subfuscescentibus.

- , *Engr. Pap. d' Eur.* 285, a, b.
- Noctua strigosa, *Fabr. Mant. Ins.* ii. 142, 61; *Ent. Syst.* iii. 1, 32, 79. *Wien. Verz.* 88, 15? *Bork. Eur. Schm.* iv. 652, 277.
- Phalæna-Noctua strigosa, *Gmel. ed. Syst. Nat.* i. 5, 2546, 1053.
- Noctua favillacea, *Naturf.* 1787, pl. 3, f. 5—8. *Bork. Eur. Schm.* iv. 217, 100. *Esp. Schm.* iv. pl. 127, f. 4. *Hübner. Samml. Eur. Schm. Noct.* pl. 1, f. 2; *Larv. Lep.* iv. Noct. iv. *Bomb.* A, B, f. 22.
- Acronycta favillacea, *Dup. Hist. Nat. Lép. Fr.* vi. 3, 230, pl. 87, f. 4.
- Acronycta strigosa, *Steph. Ill. Brit. Haust.* iii. 39, 4; *Cat. Brit. Lep.* 105, 3. *Treit. Schm. Eur.* v. 1, 23, 7. *Boisd. Ind. Méth.* 94, 712. *Guén. Ess.* 235; *Noct.* i. 51, 65. *Freyer, Neu. Beit. Schm.* pl. 22. *Wood, Ind. Ent.* pl. 52, f. 1667. *Herr.-Schæff. Eur. Schm.* ii. 181, 14.
- Hyboma strigosa, *Hübner. Verz. Schm.* 200, 2027.
- Acronyctia strigosa, *Meig. Handb.* 148, 3; *Syst. Besch. Eur. Schm.* iii. 71, 12; pl. 90, f. 13.
- a. England. From Mr. Stephens' collection.
- b, c. Europe. From M. Becker's collection.
- d. France.

8. ACRONYCTA ALNI.

Cana; thorax lineis lateralibus nigris; abdomen album; alæ anticæ cinereo subnebulosæ, vitta interrupta lituris costalibus guttisque marginalibus nigris; posticæ albæ, cinereo marginatæ.

- , *Deg. Ins.* i. 280, pl. 11, f. 25—28; ii. 412. *Engr. Pap. d' Eur.* 386, a—e.
- Phalæna-Noctua Alni? *Linn. Syst. Nat.* i. 2, 845. *Gmel. ed. Syst. Nat.* i. 5, 2559, 134. *Turt. Syst. Nat.* iii. 322. *Donov. Nat. Hist. Brit. Ins.* x. 8, pl. 327, f. 2.

Noctua Alni, *Capieuz, Naturf.* xii. 58, pl. 1, f. 4; xiv. 91, pl. 4, f. 11. *Fuessl. Ent. Mag.* ii. pl. 1, f. 5—8. *Fabr. Sp. Ins.* ii. 231, 110; *Mant. Ins.* ii. 166, 213; *Ent. Syst.* iii. 2, 89, 266. *Esp. Schmett.* iv. pl. 116, f. 4—6. *Bork. Eur. Schmett.* iv. 250, 109. *Hübner. Samml. Eur. Schmett. Noct.* pl. 1, f. 3; *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, b, f. a—d.

Acronycta Alni, *Treit. Schmett. Eur.* v. 1, 16, 5. *Dup. Hist. Nat. Léop. Fr.* vi. 3, 233, pl. 87, f. 5. *Steph. Ill. Brit. Haust.* iii. 38, 3; *Cat. Brit. Lep.* 105, 2. *Boisd. Ind. Méth.* 94, 710. *Guén. Ann. Soc. Ent. Fr.* vi. 235; *Noct.* i. 51, 66. *Freyer, Beitr.* pl. 16. *Westw. & H. Brit. Moths*, i. 195, pl. 41, f. 14; pl. 42, f. 3. *Herr.-Schæff. Eur. Schmett.* ii. 182, 15.

Noctua degener, *Wien. Verz.* 70, 4.

Jocheæra Alni, *Hübner. Verz. Schmett.* 201, 2034.

Acronyctia Alni, *Meig. Syst. Besch. Eur. Schmett.* iii. 70, 11, pl. 90, f. 12.

a, b. England. From Mr. Stephens' collection.

c. England. From Mr. Haworth's collection.

d. England.

9. ACRONYCTA LIGUSTRI.

Thorax albus, atomis fasciisque duabus nigris; abdomen cinereum; alæ anticæ nigro-cinereæ, lineis transversis undulatis nigris, plaga, strigis annuloque discali albis; posticæ fuscescentes.

———, *Deg. Ins.* i. 113, pl. 5; ii. 434. *Engr. Pap. d' Eur.* 320, a—d. *Harr. V. M.* 19?

Noctua Ligustri, *Wien. Verz.* 70, 1. *Fabr. Mant. Ins.* ii. 172, 244. *Ent. Syst.* iii. 2, 102, 303. *Kléem. Ins. Gesch.* i. pl. 22, f. 1—6. *Esp. Schmett.* iv. pl. 119, f. 1—4. *Bork. Eur. Schmett.* iv. 125, 51. *Hübner. Samml. Eur. Schmett. Noct.* pl. 5, f. 21; *Larv. Lep.* iv. *Noct.* i. *Bomb.* B, b, f. 2 a. *Haw. Lep. Brit.* 52, 178.

Noctua litterata, *Panz. Nomencl. Schæff. Icon.* ii. 105, f. 3, 4.

Phalæna-Noctua Ligustri, *Gmel. ed. Syst. Nat.* i. 5, 2569, 1151.

Polymixis Ligustri, *Hübner. Verz. Schmett.* 205, 2060.

Acronycta Ligustri, *Treit. Schmett. Eur.* v. 1, 20. *Dup. Hist. Nat. Léop. Fr.* vi. 256, pl. 89, f. 1. *Steph. Ill. Brit. Ent. Haust.* iii. 38, 2; *Cat. Brit. Lep.* 104, 1. *Guén. Ess.* 235; *Noct.* i. 51, 67. *Boisd. Ind. Méth.* 94, 711. *Frey. Beitr.* pl. 142. *Westw. & H. Brit. Moths*, i. 194, pl. 41, f. 12; pl. 42, f. 1. *Herr.-Schæff. Eur. Schmett.* ii. 184.

Var. Noctua coronula, *Haw. Lep. Brit.* 179.

Aconyctia Ligustri, *Meig. Handb.* 148, 2; *Syst. Besch. Eur. Schmett.* iii. 72, 13, pl. 91, f. 7.

a—g. England. From Mr. Stephens' collection.

h—m. England.

n—p. Europe. From M. Becker's collection.

r. ———?

Group 6.

Arctomyscis et Pharetra, *Hübner*.

Between the fourth group and the fifth, as regards the tracings on the fore wings.

10. ACRONYCTA RUMICIS.

Cinerea; abdomen sordide albidum; alæ anticæ nebulis obscurioribus, lineis angulosis transversis, guttis marginalibus annulisque duobus discalibus nigris; posticæ sordide albidæ, cinereo marginatæ.

———, *Albin, Nat. Hist. Engl. Ins.* pl. 22. *Merian, Ins. Eur.* pl. 82. *Deg. Ins.* i. 185, pl. 9; ii. 411. *Roës. Ins. Belg.* i. pl. 27. *Wilk.* 26, pl. 56. *Engr. Pap. d'Eur.* 288, a—f. *Harr. V. M.* 29.

Phalæna-Noctua Rumicis, *Linn. Syst. Nat.* i. 2, 516; *Faun. Suec.* 1200. *Gmel. ed. Syst. Nat.* i. 5, 2569, 164. *Berk. Syn.* i. 142. *Donov. Hist. Nat. Brit. Ins.* iv. pl. 126. *Stew. Él.* ii. 190. *Turt. Syst. Nat.* iii. 335.

Noctua Rumicis, *Wien. Verz.* 67, 3. *Fabr. Sp. Ins.* ii. 238, 143; *Mant. Ins.* ii. 180, 288; *Ent. Syst.* iii. 1, 118, 358. *Esp. Schmett.* iv. pl. 117, f. 8, 9; pl. 117, a, f. 3, 4. (*Aceris* erratim). *Bork. Eur. Schmett.* iv. 247, 108. *Hübner. Samml. Eur. Schmett. Noct.* pl. 2, f. 93; *Larv. Lep.* iv. *Noct.* i. *Bomb.* b, c, f. 1. *Haw. Lep. Brit.* 50, 178.

Acronycta Rumicis, *Treit. Schmett. Eur.* i. 38. *Steph. Ill. Brit. Ent. Haust.* iii. 42, 11; *Cat. Brit. Lep.* 105, 6. *Dup. Hist. Lép. Fr.* vi. 241, pl. 88, f. 2. *Boisd. Ind. Méth.* 95, 718. *Guén. Ess.* 235; *Noct.* i. 53, 70. *Westw. & Humph. Brit. Moths*, i. 197, pl. 41, f. 12; pl. 42, f. 15. *Herr.-Schæff. Eur. Schmett.* ii. 182, 18.

Var. Noctua Euphorbiæ, *Haw. Lep. Brit.* 178.

Acronyctia Rumicis, *Meig. Handb.* 150, 8; *Syst. Besch. Eur. Schmett.* iii. 69, 8, pl. 91, f. 6.

Var. Acronycta Euphorbiæ, *Steph. Ill. Brit. Ent. Haust.* iii. 43
12.

Var. Acronycta Euphrasiæ, *Steph. Ill. Brit. Ent. Haust.* iii. 43,
13.

Var. Acronycta Salicis, *Curt. Brit. Ent.* iii. pl. 136. *Steph. Cat.*
Brit. Lep. 106, 7.

Acronycta Euphorbiæ, *Wood, Ind. Ent.* pl. 14, f. 320.

a. England. Presented by S. Stevens, Esq.

b—w. England. From Mr. Stephens' collection.

x—bb. England.

cc. Scotland. From Mr. Weaver's collection.

dd—ee. Europe. From M. Becker's collection.

ff—ii. France.

11. ACRONYCTA AURICOMA.

Cinerea; abdomen canescens; alæ anticæ atomis, lineis duabus transversis duplicatis (interiore undulata exterioro denticulata) ocelloque discali nigris; posticæ fusco-subcinereæ.

———, *Roës. Ins. Bel.* i. pl. 44, f. 1, 6. *Engr. Pap.*
d' Eur. 289, a—c.

Noctua auricoma, *Wien. Verz.* 67, 6. *Fabr. Mant. Ins.* ii. 174,
256; *Ent. Syst.* iii. 2, 105, 216. *Esp. Schmett.* iv. pl. 117,
f. 4—6; pl. 117, A, f. 1, 2. *Bork. Eur. Schmett.* iv. 234, 105,
Hübner. Samml. Eur. Schmett. Noct. pl. 2, f. 8; *Larv. Lep.* iv.
Noct. i. *Bomb.* B, b, c, f. 2. *Haw. Lep. Brit.* 58.

Noctua Lapathi, *Schr. Faun. Boic.* 1499.

Noctua similis, *Haw. Lep. Brit.* 57, 180.

Phalæna-Noctua auricoma, *Gmel. ed. Syst. Nat.* i. 5, 2559, 1119.

Noctua Pepli, *Hübner. Samml. Eur. Schmett. Noct.* pl. 134, f. 614.

Acronycta auricoma, *Treit. Schmett. Eur.* v. 1, 35, 12. *Dup. Hist.*
Nat. Lép. Fr. vi. 3, 326, pl. 87, 6. *Steph. Ill. Brit. Ent.*
Haust. iii. 41, 8; *Cat. Brit. Lep.* 105, 4. *Guén. Noct.* i. 55,
75. *Boisd. Ind. Méth.* 95, 717. *Westw. & Humph. Brit.*
Moths, i. 196, pl. 41, f. 101; pl. 42, f. 9. *Herr.-Schæff. Eur.*
Schmett. ii. 182, 17.

Acronycta similis, *Steph. Ill. Brit. Ent. Haust.* ii. 41, 9.

Pharetra auricoma, *Hübner. Eur. Schmett.* 202, 2039.

Acronyctia auricoma, *Meig. Handb.* 150, 7; *Syst. Besch. Eur.*
Schmett. iii. 67, 4, pl. 91, f. 3.

a—j. England. From Mr. Stephens' collection.

k—o. England.

p. Europe. From M. Becker's collection.

q. France. From Mr. Milne's collection.

r, s. France.

12. ACRONYCTA MENYANTHIDIS.

Cana; abdomen albidum; alæ anticæ annulis duobus discalibus, fasciaque tenui interiore undulata subduplicata nigris, fascia exteriorè denticulata albo-nigra, guttis marginalibus nigris; posticæ albidæ.

Noctua Menyanthidis, *Esp. Schmett.* iv. 461, pl. 144, f. 5. *View. Schmett.* 56, pl. 2, f. 1, 2. *Sepp. Ins.* iv. pl. 49. *Hübner. Samml. Eur. Schmett. Noct.* pl. 2, f. 6, 7.

Acronycta Menyanthidis, *Treit. Schmett. Eur.* v. 1, 34, 11. *Dup. Hist. Nat. Lép. Fr.* vi. 3, 289, pl. 88, f. 1. *Steph. Ill. Brit. Haust.* iii. 42, 10, pl. 27, f. 1; *Cat. Brit. Lep.* 105, 5. *Boisd. Ind. Méth.* 95, 716. *Guén. Noct.* i. 55, 76. *Herr-Schæff. Eur. Schmett.* ii. 182, 16.

Pharetra Menyanthidis, *Hübner. Verz. Schmett.* 202, 2040.

Acronyctia Menyanthidis, *Meig. Handb.* 150, 6, pl. 12, f. 4.

Acronycta Menyanthidis, *Westw. & Humph. Brit. Moths*, i. 196, pl. 42, f. 11.

a—e. England. From Mr. Carter's collection.

f—o. England. From Mr. Stephens' collection.

p. England.

r—u. Europe. From M. Becker's collection.

Group 7.

Arctomyscis, *p., Hübn.*

Marbled marks on the fore wings more obscure, minute and blended than in the sixth group.

13. ACRONYCTA EUPHORBIAE.

Cinerea; alæ anticæ lineis duabus transversis (exteriorè flexa) undulatis annulisque duobus discalibus nigricantibus; posticæ albidæ.

———, *Engr. Pap. d'Eur.* 293, a, b.

Phalæna-Noctua Euphorbiæ, *Gmel. ed. Syst. Nat.* i. 5, 2560, 1121.

Noctua Euphorbiæ, *Wien. Verz.* 67, 4. *Fabr. Mant. Ins.* ii. 174, 260; *Ent. Syst.* iii. 2, 108, 324. *Esp. Schmett.* 117, f. 1, 2. *Schr. Faun. Boic.* 1500.

- Acronycta Euphorbiæ, *Treit. Schmett.* v. 1, 40, 147. *Herr.-Schæff. Schmett. Eur.* ii. pl. 73, f. 375, 376 (377?). *Guén. Noct.* i. 56, 78. *Boisd. Ind. Méth.* 95, 719. *Herr.-Schæff. Eur. Schmett.* ii. 184, 19.
- Arctomyscis Euphorbiæ, *Hübner. Verz. Schmett.* 202, 2042.
- Arctomyscis Cyparissiæ, *Hübner. Verz. Schmett.* 202, 2045.
- Acronycta Euphorbiæ, var. A. Montivaga, *Guén. Noct.* i. 57.
- Noctua Euphorbiæ? *Hübner. Eur. Schmett. Noct.* pl. 3, f. 12.
- Noctua Euphrasiæ? *Bork. Eur. Schmett.* iv. 227, 232, 104.
- Acronyctia Euphorbiæ, *Meig. Syst. Besch. Eur. Schmett.* iii. 68, 6, pl. 91, f. 4.

a—c. Europe. From M. Becker's collection.

14. ACRONYCTA EUPHRASIÆ.

Cinerea; abdomen sordide albidum; alæ anticæ annulo discali, lineis transversis duplicatis (duabus exterioribus denticulatis una interiore undulosa) punctisque marginalibus nigris; posticæ sordide albidæ.

- , *Albin, Nat. Hist. Engl. Ins.* pl. 88, f. F (larva).
- Noctua Euphorbiæ, *Scriba, Beit. Ins. Gesch.* ii. 109, pl. 9. *Bork. Eur. Schmett.* iv. 227, 103. *Haw. Lep. Brit.* 51? *Hübner. Samml. Eur. Schmett. Noct.* pl. 134, f. 613. *Dup. Hist. Nat. Lep. Fr.* iii. 250, pl. 88, f. 3.
- Noctua Euphrasiæ, *Esp. Schmett.* iv. pl. 117, f. 1—3. *Herr.-Schæff. Schmett. Eur.* ii. pl. 73, f. 373, 374.
- Noctua Cyparissiæ, *Hübner. Samml. Eur. Schmett. Noct.* pl. 134, f. 615.
- Noctua abscondita, *Herr.-Schæff. Schmett. Eur.* ii. pl. 18, f. 87—89.
- Noctua Esulæ, *Hübner. Eur. Schmett. Noct.* pl. 134, f. 613.
- Acronycta Euphrasiæ, *Treit. Schmett. Eur.* v. 1, 43, 15. *Dup. Hist. Nat. Léop. Fr.* vi. 3, pl. 88, f. 4. *Boisd. Ind. Méth.* 95, 720. *Noct.* i. 43, 13. *Herr.-Schæff. Eur. Schmett.* ii. 184, 20.
- Acronyctia Euphorbiæ, *Dup. Hist. Nat. Léop. Fr.* vi. 3, pl. 88, f. 3.
- Acronyctia Euphrasiæ, *Meig. Syst. Besch. Eur. Schmett.* iii. 68, 7, 7, pl. 91, f. 5.
- Arctomyscis Euphrasiæ, *Hübner. Verz. Schmett.* 202, 2044.
- a, b. Europe. From M. Becker's collection.

15. ACRONYCTA ABSCONDITA.

Cinerea ; alæ anticæ macula annuloque discali maculisque costalibus pallidioribus, necnon fasciis duabus pallidioribus nigricante marginatis, ciliis nigricante guttatis.

Acronycta abscondita Treit. Schmett. Eur. Suppl. x. 5. Frey. Neu. Beit. Schmett. ii. 132, pl. 178? Herr.-Schæff. Schmett. Eur. ii. pl. 73, f. 378. Boisd. Ind. Méth. 95, 721. Guén. Noct. i. 59, 80. Herr.-Schæff. Eur. Schmett. ii. 184, 21.

Europe.

16. ACRONYCTA MYRICÆ.

Obscure cinerea ; alæ anticæ annulis duobus lineisque transversis angulosis nigricantibus lineolisque exterioribus albidis ; posticæ maris albidæ, fœm. fuscescentes.

Acronycta Myricæ, Guén. Noct. i. 59, 81.

Acronycta Euphorbiæ, Steph. Cat. Brit. Lep. 117, 8.

a. Scotland. Presented by S. Stevens, Esq.

b—e. Scotland. From Mr. Stephens' collection.

f, g. Scotland. From Mr. Foxcroft's collection.

h. Scotland. From Mr. Stevens' collection.

North America.

Group 1.

Like the first European group.

17. ACRONYCTA TRITONA.

Cinerea ; alæ anticæ strigis duabus furcatis (una basali, altera apud angulum interiorem), annulo discali fasciis duabus subobsoletis unaque exteriori angulata nigris ; posticæ fuscescentes.

Triæna tritona (Noctua bombycoides, Apatele conformis), Hübn. Samml. Exot. Schmett. i. 21, 54, f. 107, 108; Verz. Schmett. 201, 2032.

Acronycta tritona, Guén. Noct. i. 42, 45.

a. Florida. Presented by E. Doubleday, Esq.

b. ———?

18. ACRONYCTA LOBELIÆ.

Pallide cinerea; abdomen canum; alæ anticæ lineis transversis angulosis, lineola trifurcata discali, lineola submarginali vitæque posteriore ramosa late interrupta nigris; posticæ albæ.

Acronycta Lobeliæ, Guén. Noct. i. 44, 47.

a. New York. Presented by E. Doubleday, Esq.

19. ACRONYCTA FURCIFERA.

Var.? *Cinerea; abdomen albidum; alæ anticæ vitta late interrupta, lituris nonnullis discalibus strigisque exterioribus cuneatis nigris, litura ψ non bene determinata; posticæ pallidissime fuscæ, basi albidæ.*

Acronycta furcifera, Guén. Noct. i. 44, 50.

Var.? *Cinereous.* Abdomen whitish. Fore wings with a black widely interrupted stripe, with a few black discal marks, and with exterior cuneiform black streaks; one of the latter, traversing the stripe, forms an imperfect ψ . Hind wings very pale brown, whitish towards the base. Length of the body 7 lines; of the wings 18 lines.

a. Florida. Presented by E. Doubleday, Esq.

20. ACRONYCTA HASTA.

A. *furciferæ simillima, obscurior; alæ anticæ violaceo-cinereæ; posticæ sordide cinerascens, subiridescentes, subtus albidæ fascia media maculaque discali obscuris.*

Acronycta hasta, Guén. Noct. i. 45, 51.

United States.

21. ACRONYCTA TELUM.

A. *furciferæ affinis; alæ anticæ cinereæ, conspersæ, angustæ, oblongæ, apice productæ; posticæ sordide albidæ, subiridescentes, margine venisque nigricantibus, subtus albæ striga basali macula discali, linea interrupta punctisque marginalibus nigris.*

Acronycta telum, Guén. Noct. i. 45, 52.

United States.

22. ACRONYCTA SPINIGERA.

Cana ; alæ anticæ fusco conspersæ, vitta latissime interrupta, annulis duobus discalibus subobsoletis, linea exterior angulosa transversa lineolaque submarginali nigricantibus ; posticæ pallidissime fuscescentes.

Acronycta spinigera, Guén. Noct. i. 45, 53.

a—c. New York, United States. Presented by E. Doubleday, Esq.

23. ACRONYCTA INTERRUPTA.

Alba, A. Psi minor ; alæ anticæ lineis maculisque solitis strigisque costalibus pallide nigricantibus, linea basali nigra apud medium angulata, apice bifurcata, striga apud marginem internum, striga altera parallela, linea maculam reniformem trans-eunte punctisque marginalibus nigris ; posticæ flavescence-cinereis.

Acronycta interrupta, Guén. Noct. i. 46, 54.

Georgia.

24. ACRONYCTA LEPUSCULINA.

A. interruptæ et A. leporinæ affinis, A. leporina paullo major.

Var. ? Cana ; alæ punctis marginalibus nigris ; alæ anticæ fasciis duabus incompletis nigricantibus fasciaque exterior obliqua guttulari nigra ; posticæ albidæ.

Acronycta lepusculina, Guén. Noct. i. 46, 55.

North America ?

Var. ? Hoary. Wings with black dots along the exterior border. Fore wings with two incomplete nearly upright blackish bands, and with an exterior oblique dotted black band. Hind wings whitish. Length of the body 8 lines; of the wings 18 lines.

Var. β. First band almost obsolete; second and third very incomplete.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

b. United States. Presented by E. Doubleday, Esq.

25. ACRONYCTA MODICA.

Albida; alæ anticæ lineis nonnullis undulatis transversis interruptis nigricantibus, striga basali bene determinata annulisque duobus incompletis nigris, litura ψ non bene determinata; posticæ cinereæ, fasciis duabus margineque obscurioribus.

Whitish. Fore wings with several undulating transverse interrupted blackish lines, with a more distinct black mark near the base, with two imperfect black ringlets, and with the usual ψ, which is indistinct. Hind wings cinereous, with two bands and the border darker. Length of the body 5 lines; of the wings 14 lines.

a. United States. Presented by E. Doubleday, Esq.

26. ACRONYCTA GRISEA.

Cinerea; abdomen album; alæ anticæ breviusculæ latiusculæ, apud marginem exteriorem vix obliquæ annulis duabus discalibus, vitta late interrupta fasciisque duabus nigris, lituris duabus ψ distinctis, fascia interiore undulata interrupta, exteriore angulosa.

Noctua grisea, Barnston, MSS.

Cinereous. Abdomen and hind wings white. Fore wings rather short and broad, hardly oblique along the exterior border, with two irregular black discal ringlets, with a widely interrupted black stripe, and with two black bands, each of which forms a distinct ψ, where it traverses the stripe; interior band undulating, interrupted; exterior band zigzag. Length of the body 5—6 lines; of the wings 14—16 lines.

a—c. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Group 2.

Like the third European group.

27. ACRONYCTA HASTULIFERA.

Cana; alæ anticæ fusco conspersæ, annulis duobus discalibus nigris, fasciis duabus angulosis albis nigro marginatis, guttis marginalibus nigris, litura ψ vix determinata, posticæ cinerascens fascia obscuriore.

Phalæna hastulifera, Abbot & Smith, *Nat. Hist. Lep. Ins. Georgia*, ii. 183, pl. 92.

Acronycta hastulifera, Guén. *Ann. Soc. Ent. Fr.* i. 47, 57.

a, b. New York. Presented by E. Doubleday, Esq.

28. ACRONYCTA ACERICOLA.

Canescens ; *alæ anticæ cinereo nebulosæ, fasciis duabus undulatis albidis, lineolis, annulo discali guttisque marginalibus fuscis ; posticæ margine lato cinerascente.*

Noctua Aceris, Abbot & Smith, *Nat. Hist. Lep. Ins. Georgia*, ii. pl. 93.

Acronycta Acericola, Guén. *Noct.* i. 48, 59.

Georgia, Virginia.

29. ACRONYCTA RUBRICOMA.

A. Aceris simillima. *Larva omnino diversa.*

Acronycta rubricoma, Guén. *Noct.* i. 48, 60.

Acronycta Acericola ?

North America.

30. ACRONYCTA IMPLETA.

Cana ; *caput et thorax nigro parce conspersa ; alæ anticæ lineis nonnullis transversis incompletis undulatis, annulis duobus incompletis discalibus strigisque apud marginem interiorem cuneatis nigris, strigis duabus posticis latis fuscis ; posticæ cinereæ, marginibus fuscescentibus..*

Hoary. Head and thorax slightly speckled with black. Fore wings with several incomplete undulating black transverse lines, with two incomplete black discal ringlets, and with cuneiform black streaks by the interior border, near which there are two broad brown streaks. Hind wings cinereous, with brownish borders. Length of the body 7 lines ; of the wings 18 lines.

a. ——— ?

31. ACRONYCTA CONTACTA.

Cinerea; abdomen canum; alæ anticæ nitentes, annulis duobus incompletis discalibus strigisque apud marginem exteriorem cuneatis confluentibus nigricantibus; posticæ pallide cinereæ, fascia obscuriore.

Cinereous. Abdomen hoary. Fore wings shining, with two imperfect blackish discal ringlets, and with some slight blackish marks, which are cuneiform, and form a row along the exterior border, on which they are confluent. Hind wings pale cinereous, with a darker band. Length of the body 8 lines; of the wings 20 lines.

a, b. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

Group 3.

Alæ anticæ canæ, strigis parvis discalibus guttisque marginalibus nigris; posticæ albæ.

Colour hoary. Fore wings with minute black discal streaks and with black marginal dots. Hind wings white.

32. ACRONYCTA OBLINITA.

Albida; alæ anticæ nigro conspersæ, guttis discalibus et marginalibus nigris; posticæ albæ, guttis marginalibus fuscis.

Phalæna oblinita, Abbot & Smith, Nat. Hist. Lep. Ins. Georgia, ii. 187, pl. 94.

Acronycta oblinita, Guén. Noct. i. 49, 61.

a—d. New York. Presented by E. Doubleday, Esq.

e, f. Georgia. From Mr. Milne's collection.

g. Nova Scotia. From Lieut. Redman's collection.

Group 4.

Like the fourth European group.

33. ACRONYCTA INNOTATA.

Albida; alæ anticæ litura discali, maculis costalibus fasciisque duabus angulosis incompletis guttisque marginalibus nigris, fascia interiore nonnunquam subobsoleta, exteriori albo marginata; posticæ albæ.

Acronycta innotata, Guén. Noct. i. 50, 64.

a—d. Trenton Falls, New York. Presented by E. Doubleday Esq.

Group 5.

Like the sixth European group.

34. ACRONYCTA BRUMOSA.

Mas. *Fusco-cinerea, nigro varia; abdomen pallide cinereum; alæ anticæ albo variæ, annulo discali albo; posticæ albæ, margine venisque exterioribus fuscis.*

Acronycta brumosa, Guén. Noct. i. 52, 68.

a. Florida. Presented by E. Doubleday, Esq.

35. ACRONYCTA HAMAMELIS.

Fœm. *Cinereo-fusca; abdomen cinereum; alæ anticæ annulo discali albo, lineis transversis angulosis nigris, marginibus albo variis; posticæ fuscescentes, fascia saturatiore.*

Acronycta hamamelis, Guén. Noct. i. 52, 69.

This may be the female of *A. brumosa*.

a. United States. Presented by E. Doubleday, Esq.

36. ACRONYCTA SUPERANS.

Cinerea; alæ anticæ albæ, fusco conspersæ et plagiatae, lituris discalibus, lineis transversis angulosis, vitta postica guttisque marginalibus nigris, macula postica basali lutea; posticæ fuscescentes, macula fasciæque obscurioribus.

Acronycta superans, Guén. Noct. i. 53, 71.

a. New York. Presented by E. Doubleday, Esq.

37. ACRONYCTA CLARESCENS.

Pallide cinerea ; abdomen et alæ posticæ pallide fuscescentia ; alæ anticæ lineæ basali, fasciis undulatis duplicatis, annulis duobus discalibus guttisque marginalibus nigris.

Acronycta clarescens, Guén, Noct. i. 54, 73.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.

d. Nova Scotia. From Lieut. Redman's collection.

38. ACRONYCTA LONGA.

A. Rumicis et A. auricoma affinis ; alæ anticæ oblongæ angustæ, atomis lineisque nigricantibus ; posticæ albido-cinereæ, venis obscurioribus.

Acronycta longa, Guén. Noct. i. 54, 74.

North America.

Var.? *Albida ; thorax nigro conspersus ; abdomen canum ; alæ anticæ sat angustæ, nigro conspersæ et ex parte nebulosæ, fasciis undulatis albis, annulis duobus discalibus nigris ; posticæ subcinereæ.*

Var.? Whitish. Thorax speckled with black. Abdomen hoary. Fore wings rather narrow, speckled, and partly shaded with black, which is interrupted by undulating white bands ; some of the latter are incomplete, as are also the two discal black ringlets. Hind wings slightly cinereous. Length of the body 5 lines ; of the wings 13 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

39. ACRONYCTA XYLINOIDES.

Pallide cinerea albo varia ; abdomen albidum ; alæ anticæ lineis transversis lanceolatis, annulis duobus incompletis discalibus lituraque ♀ nigris ; posticæ albæ, nonnunquam subfuscescentes.

Acronycta xylinoides, Guén. Noct. i. 56, 77.

a, b. Florida. Presented by E. Doubleday, Esq.

c—e. United States. From Mr. Milne's collection.

f. ——— ?

Group 6.

Like the seventh European group.

40. ACRONYCTA DECLARATA.

Nigra ; thorax albo varius ; abdomen cinereum ; alæ anticæ nigricantes fasciis quatuor angulosis albis nigro marginatis, annulis duobus albis ; posticæ canæ, apud marginem exteriorum nigrum fuscescentes.

Black. Thorax with some white marks. Abdomen cinereous. Fore wings blackish, with four irregular zigzag white black-bordered bands, and with two white ringlets, of which the exterior one is much brighter and more conspicuous than the interior one. Hind wings hoary, brown towards the exterior border, which is black. Length of the body 6 lines ; of the wings 16 lines.

Canada. In Mr. Saunders' collection.

41. ACRONYCTA IMPRESSA.

Albida ; thorax nigro conspersus ; alæ anticæ sat angustæ, punctis nigris conspersæ et trimaculatæ ; posticæ cinereæ, basi albide.

Whitish. Thorax speckled with black. Fore wings rather narrow, thickly speckled with black ; the specks in some parts confluent, and forming three large diffuse black spots. Hind wings cinereous, whitish towards the base. Length of the body 6 lines ; of the wings 14 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

42. ACRONYCTA INSITA.

Cana ; alæ guttis marginalibus nigris ; anticæ apud costam nigro notatæ, fasciis guttularibus annulisque duobus discalibus incompletis nigricantibus, fascia exterior e lunulis nigris ; posticæ albide, gutta fasciæque nigricantibus.

Hoary. Wings with black dots along the exterior border. Fore wings with blackish marks along the costa, with some imperfect dotted blackish bands, with two incomplete blackish discal ringlets, and with an exterior undulating more complete band composed of

black lunules. Hind wings whitish, with a blackish dot and discal band, which are most apparent beneath. Length of the body 7 lines; of the wings 18 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

43. ACRONYCTA FASCIATA.

Cinerea, nigro varia; abdomen canum; alæ anticæ strigis nonnullis discalibus latis abbreviatis, fasciis nonnullis undulosis annulisque duobus discalibus nigris, ciliis nigro-guttatis; posticæ pallide fusæ, basi nonnunquam albidæ.

Noctua fasciata, Barnston, MSS.

Cinereous, varied with black. Abdomen hoary. Fore wings with some broad short black streaks in the disk, with some slight undulating black bands, and with two incomplete black discal ringlets; ciliæ with black dots. Hind wings pale brown, sometimes whitish towards the base. Length of the body 5—6 lines; of the wings 14—16 lines.

a—e. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

44. ACRONYCTA MIXTA.

Albida; thorax nigro varius; abdomen canum; alæ latiusculæ; anticæ nigro conspersæ, fasciis plurimis undulatis ex parte incompletis, maculis marginalibus annulisque duobus subobsoletis discalibus nigris.

Noctua mixta, Barnston, MSS.

Whitish. Thorax varied with black. Abdomen hoary. Wings rather broad. Fore wings speckled with black, and adorned with numerous undulating partly incomplete black bands; a row of black spots along the exterior border; two very indistinct black discal ringlets. Length of the body 6—7 lines; of the wings 14—16 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

West Indies.

Group 1.

Distinct from all the preceding groups.

45. ACRONYCTA DISTINGUENDA.

Albida ; tarsi nigro fasciati ; alæ anticæ fuscæ conspersæ, lineis duabus angulosis duplicatis transversis, strigis exterioribus lanceolatis, lituris duabus connexis arcuatis discalibus lunulisque marginalibus nigris ; posticæ marginibus latissimis fuscis.

Whitish. Tarsi with black bands. Fore wings speckled with brown, adorned with two double zigzag transverse black lines, with an exterior row of lanceolate black streaks, with two black curved discal marks, which are connected in the middle, and with a row of black semicircles along the exterior border. Hind wings white, with very broad brown borders. Length of the body 9 10 lines ; of the wings 18—20 lines.

a, b. St. Domingo. From Mr. Tweedie's collection.

Africa.

Group 1.

Like the fourth European group.

46. ACRONYCTA PACHYCEPHALA.

A. megacephala paullo minor ; palpi crassiores, nigro vix notatæ ; abdomen incrassatum, non depressum nec apud latera villosum ; alæ posticæ vena mediana optime determinata.

Acronycta pachycephala, Guén. Noct. i. 50, 63.

Senegal.

Asia.

Group 1.

Like the fourth European group.

47. ACRONYCTA PRUINOSA.

Albida ; thorax nigro fasciatus ; alæ anticæ lineis transversis undulatis interruptis, lituris discalibus maculisque costalibus nigris ; posticæ fascia margineque cinerascentibus.

Acronycta pruinosa, Guén. Noct. i. 53, 72.

Silhet. Java.

Group ?

48. ACRONYCTA ? LUTEA.

Alæ anticæ cinereo fuscoque variæ, strigis undatis nigris et macula alba ad marginem interiorem ; posticæ luteo-flavæ, fascia intramarginali nigra.

Acronycta lutea, Bremer und Grey, Beitr. zur Schmett. Fauna der Nordlichen China's, 17, 85.

North China.

Genus 4. SIMYRA.

Corpus robustum. Proboscis inconspicua. Palpi breves, pilosi. Antennæ graciles. Abdomen alas posticas plus minusve superans. Pedes vix validi ; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat angustæ aut mediocriter latæ ; anticæ apud costam vix convexæ, apice acuminatæ, margine exteriori sat obliquo.

Simyra, Ochs. Schmett. Eur. iv. 81 ; Treits. ; Steph. Ill. Brit. Ent. Haust. 81 ; Guénée, Ann. Soc. Ent. Fr. vi. 341.

Leucania, p., *Boisd.* ; *Meig.*

Symira, p., *Hübner. Verz. Schmett.*

Asema, *Sodoff, Bull. Soc. Imp. Mosc.* xiv.

Symira, *Herr.-Schæff. Eur. Schmett.* ii. 178.

Body stout. Proboscis not visible. Palpi short, pilose. Antennæ slender. Abdomen extending more or less beyond the hind wings. Legs hardly stout; hind tibiæ with four rather long spurs. Wings rather narrow or of moderate breadth. Fore wings hardly convex in front, acuminate at the tips, rather oblique along the exterior border; first, second and third inferior veins almost contiguous at the base; fourth remote. *Male*.—Antennæ slightly pectinated. *Female*.—Antennæ simple.

Group 1.

Palpi caput paullo superantes. Abdomen alas posticas dimidio superans. Alæ sat angustæ; anticæ apud costam perobliquæ.

Palpi extending a little beyond the head. Abdomen extending for half its length beyond the hind wings. Wings rather narrow. Fore wings very oblique along the exterior border.

1. SIMYRA DENTINOSA.

Cinerea; alæ albidæ, anticæ areolis fusco strigatis.

Noctua dentinosa, *Frey. Neu. Beit. Schmett.* iii. 97, pl. 263.

Simyra dentinosa, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 426, pl. 37.

Guén. Ann. Soc. Ent. Fr. vi.; *Noct.* i. 61, 82. *Eversm. Faun.*

Volgo Ural. 263. *Boisd. Ind. Méth.* 136, 1090.

Symira tendinosa, *Friv.*; *Herr.-Schæff. Eur. Schmett.* ii. 179, 8, pl. 76, 77, f. 393, 394.

Turkey, Ural district. Oremburg, Sarepta.

a, b. Europe? From M. Becker's collection.

Group 2.

Palpi caput non superantes. Abdomen alas posticas paullo superans. Alæ anticæ sat angustæ, subfusiformes, apud marginem anteriorem perobliquæ.

Palpi not extending beyond the head. Abdomen extending a little beyond the hind wings. Fore wings rather narrow, nearly fusiform, very oblique along the exterior border.

2. SIMYRA NERVOSA.

Alba; abdomen subtestaceo-albidum; alæ pallide testaceæ; anticæ punctis nigris conspersæ, basim versus albo strigatæ, venis exterioribus albidis, cinereo marginatis; posticæ ciliis albis.

Phalæna-Noctua nervosa, Gmel. ed. *Syst. Nat.* i. 5, 2532, 982.

———, *Engr. Pap. d'Eur.* 367, a, b.

Noctua nervosa, *Wien. Verz.* 85, 12. *Fabr. Mant. Ins.* ii. 139, 37;

Ent. Syst. iii. 2, 23, 49. *Bork. Eur. Schmett.* iv. 715, 315.

Hübner. Samml. Eur. Schmett. Noct. pl. 47, f. 226.

Simyra nervosa, *Treit. Schmett. Eur.* v. 2, 283, 2; *Suppl.* x. 85.

Dup. Hist. Nat. Lép. Fr. vii. 339, pl. 120, f. 8. *Frey. Neu.*

Beit. Schmett. pl. 101. *Boisd. Ind. Méth.* 136, 1089. *Guén.*

Noct. i. 61, 83.

Noctua oxyptera, *Esp. Schmett* iv. pl. 130, f. 6.

Leucania nervosa, *Meig. Syst. Besch. Eur. Schmett.* iii. 166, 2, pl. 108, f. 4.

Symira nervosa, *Hübner. Verz. Schmett.* 240, 2385. *Herr.-Schæff.*

Eur. Schmett. ii. 179, 9.

a. Europe. From M. Becker's collection.

3. SIMYRA TOROSA.

Argenteo-alba; alæ lineis cinereis; posticæ basi cinerascens.

Symira argentacea? *Herr.-Schæff. Schmett. Eur.* ii. 179, 7; ii.

Noct. pl. 75, f. 387, 388.

Simyra torosa, *Guén. Noct.* i. 62, 84.

Sarepta.

Group 3.

Palpi caput non superantes. Abdomen alas posticas paullo superans. Alæ mediocriter latæ; anticæ apud marginem exteriorem mediocriter obliquæ.

Palpi not extending beyond the head. Abdomen extending a little beyond the hind wings. Wings moderately broad. Fore wings moderately oblique along the exterior border.

4. SIMYRA VENOSA.

Alba; thorax vix cervino suffusus; alæ anticæ pallidissime cervinæ, fusco obsolete punctatæ, lineis duabus discalibus fusciscentibus, punctis marginalibus nigris.

———, *Deg. Ins.* ii. 415, pl. 7.

Noctua venosa, *Bork. Eur. Schm.* iv. 116, 318.

Simyra venosa, *Treit. Schm. Eur.* v. 281, 2; *Suppl.* x. 84.

Dup. Hist. Nat. Lep. Fr. viii. 343, pl. 120, f. 7. *Steph. Ill.*

Brit. Haust. iii. 82, 2; *Cat. Brit. Lep.* 138, 1. *Westw. & H.*

Brit. Moths, i. 220, pl. 48, f. 3. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 62, 85.

Leucania venosa, *Meig. Syst. Besch. Eur. Schm.* iii. 166, 1, pl. 108, f. 3. *Boisd. Ind. Méth.* 1, 136, 1092.

Noctua degener, *Sepp, Ins.* ii. pl. 3, f. 429. *Hüb. Eur. Schm.* *Noct.* pl. 81, f. 380.

Noctua atomina, *Haw. Lep. Brit.* 175, 43.

Symira degener, *Hüb. Verz. Schm.* 240, 2386.

Symira venosa, *Herr.-Schæff. Eur. Schm.* ii. 180, 9.

a—g. England. From Mr. Stephens' collection

h. England. From Mr. Carter's collection.

i—l. Europe. From M. Becker's collection.

Subdiv. 2.

A. Palpi subobsoleti. - - Fam. 2. GLOTTULIDÆ, *Guén.*

B. Palpi distincti.

A. Alæ pallida. - - - Fam. 1. LEUCANIDÆ, *Guén.*

B. Alæ obscuræ aut variegatæ.

A. Proboscis longa. Palpi ascendentes. Pedes validi. Alæ obscuræ.

a. Tibiæ non spinosæ. Alæ anticæ deflexæ.

i. Alæ anticæ apices versus obscuriores.

Fam. 3. APAMIDÆ, Guén.

ii. Alæ anticæ concolores, ut lineis maculisque distinctis.

Fam. 4. CARADRINIDÆ, Guén.

b. Tibiæ sæpe spinosæ. Alæ anticæ planæ, non deflexæ.

Fam. 5. NOCTUIDÆ, Guén.

B. Alæ coloribus variis.

a. Palpi hirti, breves, subrecti. Abdomen sæpissime glabrum. Alæ anticæ linea subterminali recta, macula reniformi nigro conspurcata.

Fam. 6. ORTHOSIDÆ, Guén.

b. Palpi robusti, ascendentes. Abdomen sæpissime cristatum. Alæ anticæ linea subterminali fracta.

Fam. 8. HADENIDÆ, Guén.

c. Alæ anticæ lineis medianis non dentatis, trapezium fingentibus. - - -

Fam. 7. COSMIDÆ, Guén.

C. Corpus elongatum. Prothorax sæpissime pilis erectis. Pedes mutici. Alæ anticæ oblongæ, lineis strigisque elongatis.

Fam. 9. XYLINIDÆ, Guén.

D. Diurnæ. Antennæ simplices. Pedes sæpissime spinis aut unguibus armati. Alæ sæpissime nigro notatæ.

Fam. 10. HELIOTHIDÆ, Guén.

Fam. 1. LEUCANIDÆ.

Pallidæ, sæpius stramineæ, in herbis per diem latentes. Thorax lævis, nunquam cristatus. Alæ anticæ tectiformes, lineis transversis maculisque ordinariis sæpius nullis. Larva 16 poda, glaberrima, lineata, plantas humiles frascens. Metamorphosis hypogea.

Nonagridi, Guénée, *Ann. Soc. Ent. Fr.* vi. 326.

Leucanides, Boisd. *Ind. Méth.* 131.

Orthosidæ, p., Herr.-Schæff. *Eur. Schmett.* ii. 188.

Leucanidi, p., Guén. *Ann. Soc. Ent. Fr.* vi. 331.

Caradrinidi, p., Nonagridi et Leucanidi, Steph. *Cat. Brit. Lep.* 116, 120, 123.

Leucanidæ, Guén. *Noct.* i. 65.

Body generally stout, occasionally slender. Proboscis and palpi short. Antennæ simple or nearly so. Fore wings mostly rather narrow, very generally pale and without the usual marks. Hind wings most often white.

A. *Antennæ sat longæ.*

A. Corpus gracile.

a. Abdomen alas posticas triente superans.

8. CÆNOBIA, *Steph.*

b. Abdomen alas posticas non superans.

18. DEINOPA, *Walk.*

c. Abdomen alas posticas paullo superans.

a. Alæ anticæ apud costam rectæ.

1. ORIA, *Hübner.*

b. Alæ anticæ apud costam subconvexæ.

i. Alæ anticæ apice obtusæ.

* Antennæ graciles.

7. SENTA, *Steph.*

** Antennæ sat validæ.

9. CARVANCA, *Walk.*

ii. Alæ anticæ apice acutæ.

6. MELIANA, *Guén.*

B. Corpus sat gracile.

12. PROXENUS, *Herr.-Schæff.*

C. Corpus robustum aut sat robustum.

a. Alæ anticæ non hamatæ.

a. Caput palpis non arcte applicatis.

i. Palpi caput vix superantes.

2. DIATARAXIA, *Hübner.*

ii. Palpi caput superantes.

* Antennarum articulus 2us 3o quadruplo longior.

† Caput mediocre.

‡ Abdomen non elongatum.

§ Caput antice non fasciculatum.

× Alæ anticæ latiusculæ, saturate tinctæ.

3. MYTHIMNA, *Ochs.*

×× Alæ anticæ pallidæ, non latiusculæ.

4. LEUCANIA, *Ochs.*

§§ Caput anticum sæpissime fasciculatum.

10. NONAGRIA, *Ochs.*

‡‡ Abdomen alas posticas dimidio superans.

17. OBRIMA, *Walk.*

†† Caput magnum.

11. AITETA, *Walk.*

** Antennarum articulus 2us 3o vix triplo longior.

5. SESAMIA, *Guén.*

b. Caput palpis arcte applicatis.

15. CHASMINA, *Walk.*

B. Alæ anticæ subhamatæ.

a. Palpi porrecti.

14. ESCHATA, *Walk.*

b. Palpi ascendentes.

16. CONTREBIA, *Walk.*B. *Antennæ breves.*13. TIMORA, *Walk.*C. *Antennæ valde robustæ.*19. LEUCOPHLEBIA, *Westw.*

Genus 1. ORIA.

Corpus gracile. Proboscis brevis. Palpi breves, graciles, oblique ascendentes; articulus 3us minutus, acuminatus. Antennæ simplices, graciles, longiusculæ. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ sat latæ, ciliis latiusculis. Alæ anticæ apud costam rectæ, apice subacuminatæ, margine exteriori mediocriter obliquo.

Synia, *Duponch. Cat.*; *Guén. Noct.* i. 66; *Herr.-Schæff. Eur. Schmett* ii. 240.

Leucania, p., *Treit.*; *Boisd.*; *Guén.* (olim.)

Oria, *Hübner. Verz. Schmett.* 240. *Steph. Cat. Brit. Lep.*

Simyra, *Steph. Ill. Brit. Ent. Haust.*

Body slender. Proboscis short. Palpi short, slender, obliquely ascending; third joint minute, acuminate. Antennæ simple, slender, rather long. Abdomen extending a little beyond the hind wings. Legs slender; hind tibiæ with four moderately long spurs. Wings moderately broad; ciliæ rather broad. Fore wings straight in front, slightly acuminate at the tips, moderately oblique along the exterior border; first, second and third veins approximate at the base; fourth rather remote.

1. ORIA MUSCULOSA.

Pallide testacea; alæ anticæ pallidissime cervinæ, vittis duabus albidis; posticæ cinerascetes.

Noctua musculosa, *Hübner. Samml. Eur. Schmett.* pl. 78, f. 363.

Oria musculosa, *Hübner. Verz. Schmett.* 240, 2388.

Leucania musculosa, *Treit. Schmett. Eur.* ii. 286. *Boisd. Ind. Méth.* 132, 1048. *Guén. Ann. Soc. Ent. Fr.* vi. 237. *Westw. & H. Brit. Moths*, i. pl. 48, f. 2.

Synia musculosa, *Dup. Hist. Nat. Léop. Fr.* iv. 341, pl. 120. *Guén. Noct.* i. 67, 86. *Herr.-Schæff. Eur. Schmett.* ii. 240, 177.

Noctua succinea? *Esp. Schmett.* 190, f. 3.

Noctua nervosa, *Haw. Lep. Brit.* 44.

Simyra nervosa, *Steph. Ill. Brit. Haust.* iii. 82.

a, b. England. From Mr. Stephens' collection.

2. ORIA MACULATA.

Alba; alæ anticæ testaceæ, fasciis interruptis obliquis albis, striga discali maculisque ciliaribus fuscis; posticæ apud margines fuscescentes.

Leucania? maculata, *Eversm. Faun. Volgo. Ural*, 267.

Synia maculata, *Guén. Noct.* i. 67, 87.

Ural Region.

a, b. Europe. From M. Becker's collection.

Genus 2. DIATARAXIA.

Corpus sat robustum. Proboscis breviuscula. Palpi breves, pilosi, caput vix superantes; articulus 3us 2i dimidio brevior. Antennæ maris subserratæ. Abdomen alas posticas superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ breviusculæ, sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori vix obliquo.

Mythimna, p., *Ochs.; Treit.; Dup.; Guén.*

Diataraxia, p., *Hübner.*

Leucania, p., *Herr.-Schæff.*

Luperina, p., *Boisd.*

Body rather stout. Proboscis rather short. Palpi short, pilose, hardly extending beyond the head; third joint elongate-conical, less than half the length of the second. Antennæ slightly serrated in the male. Abdomen extending rather beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings rather short and narrow. Fore wings straight in front, somewhat rounded at the tips, hardly oblique along the exterior border; first, second and third inferior veins rather near together at the base; fourth rather remote.

1. DIATARAXIA IMBECILIA.

Pallide cervina; alæ anticæ litura transversa hamata pallidiore, lineisque transversis undulatis obscurioribus; posticæ fuscae, ciliis cervinis.

Noctua imbecilia, *Fabr. Ent. Syst.* iii. 2, 340. *Hübner. Samml. Eur. Schmett. Noct.* 555, mas.

- Mythimna imbecilia*, *Treit. Schmett. Eur.* ii. 193; *Suppl.* 65.
Frey. Neu. Beit. Schmett. ii. pl. 153. *Eversm. Faun. Volgo. Ural*, 231. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 363, pl. 33.
Guén. Ann. Soc. Ent. Fr. vi. 237; *Noct.* i. 69, 88.
- Noctua alpina*, *Hübner. Samml. Eur. Schmett. Noct.* pl. 156, f. 728, 729, fœm.
- Mythimna alpina*, *Frey. Beitr.* pl. 36, f. 2.
- Noctua (Mythimna) alpina*, *Meig. Syst. Besch. Eur. Schmett.* iii. 153, 129, pl. 105, f. 13.
- Mythimna disparilis*, *Ochs. Syst. Gloss.*
- Mythimna nexa*, *Dup. Hist. Nat. Lép. Fr.* iii. 62, pl. 104.
- Luperina imbecilla*, *Boisd. Ind. Méth.* 116, 898.
- Noctua aliena*, *Hübner. Noct.* 441.
- Diataraxia aliena*, *Hübner. Verz. Schmett.* 219, 2200.
- Leucania imbecilla*, *Herr.-Schæff. Eur. Schmett.* ii. 239, 174.
- France. Styria. Hungary. South Russia.

Genus 3. MYTHIMNA.

Corpus robustum. Proboscis breviuscula. Palpi validi, pilosi, caput sat longe superantes; articulus 3us gracilis, longi-conicus, 2i quadrante brevior. Antennæ sat validæ, subserratæ. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcariibus quatuor longis. Alæ latiusculæ; anticæ subacuminatæ, apud costam subrectæ, margine exteriori vix obliquo. Larva cylindrica, glabra, cinereo-albida, fusco multilineata, graminibus nocte vescens. Metamorphosis subterranea.

- Mythimna*, *Aletia* et *Hyphilare*, *Hübner. Verz. Schmett.* 238.
- Mythimna*, *Leucania*, p., *Treits.*; *Boisd.*; *Guénée, Ann. Soc. Ent. Fr.* vi. 336; *Noct.* i. 68; *Herr.-Schæff. Eur. Schmett.* ii. 227.
- Mythimna* et *Segetia*, *Steph.*
- Mithimna*, *Sodoffsky, Bull. Mosc.* 1837.

Body stout. Proboscis rather short. Palpi stout, pilose, extending some distance beyond the head; third joint slender, elongate-conical, less than one-fourth of the length of the second. Antennæ rather stout, minutely serrated. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings rather broad. Fore wings almost straight in front, slightly acuminate at the tips, very slightly oblique along the exterior border; inferior veins with the usual structure.

Europe.

Group 1.

Alæ anticæ sat acutæ, lineis duabus exterioribus obliquis undulatis transversis, margine exteriori mediocriter obliquo.

Fore wings with two exterior oblique undulating transverse lines; tips rather acute; exterior border moderately oblique.

1. MYTHIMNA CONIGERA.

Luteo-cervina; abdomen pallide testaceum, basi albidum; alæ anticæ lineis duabus obliquis transversis (interiore flexa) fuscis, maculis duabus discalibus albis; posticæ albidæ, margine lato pallide ferrugineo.

Phalæna-Noctua conigera, Gmel. ed. Syst. Nat. i. 5, 2562, 603.

———, Engr. Pap. d'Eur. 492.

Noctua conigera, Wien. Verz. 84, 3. Fabr. Mant. Ins. ii. 177, 274; Ent. Syst. iii. 2, 113, 341. Bork. Eur. Schmett. iv. 692, 303. Hübn. Samml. Eur. Schmett. Noct. pl. 46, f. 222; Beitr. pl. 4, Z. Haw. Lep. Brit. 229.

Noctua (Mythimna) conigera, Meig. Syst. Besch. Eur. Schmett. iii. 152, 128, pl. 108, f. 2.

Mythimna conigera, Treit. Schmett. Eur. v. 190, 6. Dup. Hist. Nat. Léop. Fr. vii. 60, pl. 104, f. 3. Westw. & H. Brit. Moths, i. 142, pl. 29, f. 3, 4. Steph. Ill. Brit. Haust. ii. 151; Cat. Brit. Lep. 116.

Leucania conigera, Boisd. Ind. Méth. 131, 1044. Guén. Ann. Soc. Ent. Fr. vi. 237; Noct. i. 72, 90. Herr.-Schæff. Eur. Schmett. ii. 239, 172.

Noctua floccida, Esp. Schmett. iv. pl. 23, f. 5.

Aletia conigera, Hübn. Verz. Schmett. 239, 2372.

a, b. England. From Mr. Haworth's collection.

c—g. England. From Mr. Stephens' collection.

h—k. England.

l—o. Europe. From M. Becker's collection.

2. MYTHIMNA VITELLINA.

Pallide fulva; abdomen albido-testaceum; alæ anticæ lineis tribus transversis undulatis punctisque saturatioribus, macula discali fusca; posticæ albidæ.

- , *Engr. Pap. d'Eur.* 506, a, b.
 Noctua vitellina, *Hübner. Samml. Eur. Schmett. Noct.* pl. 81, f. 379; pl. 128, f. 589.
 Xanthia vitellina, *Treit. Schmett. Eur.* v. 2, 356, 9; *Suppl.* x. 88.
 Leucania vitellina, *Dup. Hist. Nat. Lép. Fr.* vii. 475, pl. 130, f. 5.
Boisd. Ind. Méth. 132, 1047. *Guén. Ann. Soc. Ent. Fr.* vi. *Noct.* i. 73, 92.
 Noctua (Xanthia) vitellina, *Meig. Syst. Besch. Eur. Schmett.* iii. 160, 144, pl. 107, f. 15.
 Aletia vitellina, *Hübner. Verz. Schmett.* 239, 2371.
 a—c. Europe. From M. Becker's collection.

Group 2.

Alæ anticæ vix acutæ, linea una exterior obliqua transversa, margine exterior subobliquo.

Fore wings with one exterior oblique transverse line; tips hardly acute; exterior border very slightly oblique.

3. MYTHIMNA TURCA.

Ferruginea; thorax postice et abdomen basi pallidiora; alæ anticæ fusco confertim conspersæ, lineis duabus transversis nigricantibus, litura intermedia transversa testacea nigricante marginata; posticæ basi pallidiores, linea obliqua nigricante.

- , *Engr. Pap. d'Eur.* 497.
 Phalæna-Noctua turca, *Linn. Syst. Nat.* 2, 847, 140; *Faun. Suec.* 1221. *Gmel. ed. Syst. Nat.* i. 5, 2561, 140. *Bjerk. Act. Stockh.* 1779, 2.
 Noctua turca, *Wien. Verz.* 84, 2. *Fabr. Sp. Ins.* ii. 237, 135; *Mant. Ins.* ii. 177, 273; *Ent. Syst.* iii. 2, 113, 339. *Esp. Schmett.* iv. pl. 122, f. 5, 6. *Bork. Eur. Schmett.* iv. 688, 301. *Hübner. Samml. Eur. Schmett. Noct.* pl. 45, f. 218. *Haw. Lep. Brit.* 266.
 Noctua (Mythimna) turca, *Meig. Syst. Besch. Eur. Schmett.* iii. 152, 127, pl. 105, f. 10.

Mythimna turca, *Treit. Schmett. Eur.* v. 2, 181, 3; *Suppl.* 72.
Dup. Hist. Nat. Lép. Fr. vii. 56, pl. 104, f. 1. *Frey. Beit. Ges. Eur. Schmett.* iii. pl. 122, f. 92. *Ent. Zeit. Stett.* ii. 96.
Steph. Ill. Brit. Haust. ii. 150; *Cat. Brit. Lep.* 116. *Westw. & H. Brit. Moths*, i. 141, pl. 29, f. 1, 2. *Boisd. Ind. Méth.* 131, 1043.

Leucania turca, *Guén. Ann. Soc. Ent. Fr.* vi. 237. *Noct.* i. 73, 93.
Herr.-Schæff. Eur. Schmett. ii. 239, 173.

Noctua Volupia, *Naturf.* ix 123.

Aletia turca, *Hübner. Verz. Schmett.* 239, 2373.

a—k. England. From Mr. Stephens' collection.

l, m. England.

n, o. Black Forest. Presented by Mr. Muff.

p—r. Europe. From M. Becker's collection.

s—w. Europe.

4. MYTHIMNA LITHARGYRIA.

Pallide cervina; abdomen testaceo-albidum; alæ anticæ lineis duabus incompletis transversis punctisque exterioribus nigris, gutta discali alba nigro submarginata; posticæ pallidiores, basi albidæ.

———, *Engr. Pap. d' Eur.* 499, *a—h.*

Noctua lithargyria, *Esp. Schmett.* iv. pl. 124, f. 6. *Bork. Eur. Schmett.* iv. 696, 305. *Hübner. Samml. Eur. Schmett. Noct.* pl. 46, f. 225.

Mythimna lithargyria, *Treit. Schmett. Eur.* v. 2, 183, 4. *Dup. Hist. Nat. Lép. Fr.* vii. 100, pl. 107, f. 1. *Steph. Ill. Brit. Ent. Haust.* ii. 151. *Westw. & H. Brit. Moths*, i. 144, pl. 29, f. 6.

Leucania lithargyria, *Boisd. Ind. Méth.* 132, 1046. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 75, 97. *Herr.-Schæff. Eur. Schmett.* ii. 238, 170.

Noctua (Mythimna) lithargyria, *Meig. Syst. Besch. Eur. Schmett.* iii. 153, 130, pl. 105, f. 11.

Hyphilare lithargyrea, *Hübner. Verz. Schmett.* 239, 2375.

Mas. Mythimna grisea, *Steph. Ill. Brit. Ent. Haust.* ii. 150.
Westw. & H. Brit. Moths, i. 144, pl. 29, f. 5.

Var. *Alæ subtus minus micaceæ ; abdomen maris penicillo nullo atro basali.*

Var. *Anargyria*, *Boisd. Ind. Méth.* 132.

a—t. England. From Mr. Stephens' collection.

v, u. Europe. From M. Becker's collection.

5. MYTHIMNA ALBIPUNCTA.

Cervina ; abdomen testaceum ; alæ anticæ lineis transversis undulatis obscurioribus subobsoletis guttaque discali alba ; posticæ pallide fuscæ ciliis albidis.

Phalæna-Noctua albipuncta, *Gmel. ed. Syst. Nat.* i. 5, 2562, 1124.

———, *Engr. Pap. d'Eur.* 49 a, a—d. *Roës. Ins. Bel.* iii. pl. 71, f. 11, 12.

Noctua albipuncta, *Wien. Verz.* 84, Q, 4. *Fabr. Mant. Ins.* ii. 178, 275 ; *Ent. Syst.* iii. 2, 114, 342. *Scriba, Beit. Ins. Gesch.* pl. 12, f. 8—10. *Hübner. Samml. Eur. Schmett. Noct.* pl. 46, f. 223. *Bork. Eur. Schmett.* iv. 693, 104.

Mythimna albipuncta, *Treit. Schmett. Eur.* v. 2, 187, 5.

Leucania albipuncta, *Boisd. Ind. Méth.* 131, 1045. *Guén. Ann. Soc. Ent. Fr.* vi. ; *Noct.* i. 75, 98. *Herr.-Schæff. Eur. Schmett.* ii. 238, 171.

Noctua (Mythimna) albipuncta, *Meig. Syst. Besch. Eur. Schmett.* iii. 154, 131, pl. 105, f. 12.

Hyphilare albipuncta, *Hübner. Verz. Schmett.* 239, 2374.

a. Europe. From M. Becker's collection.

North America.

Group I.

Palpi porrecti, caput longe superantes ; articulus 3us elongatus, lanceolatus, 2i dimidio vix brevior. Alæ latiusculæ ; anticæ apud costam rectæ, apice vix angulatæ, margine exteriori vix obliquo.

Palpi porrect, extending far beyond the head ; third joint elongate, lanceolate, hardly half the length of the second. Wings rather broad. Fore wings straight in front, hardly angular at the tips, hardly oblique along the exterior border.

This species hardly belongs to the *Leucanidæ*, but should be transferred to the 2nd division of *Noctuities* with which it agrees in the length of the terminal joint of the palpi, and in other characters.

6. MYTHIMNA? LITTERA.

Ferruginosa ; abdomen *cervinum* ; alæ anticæ lineis duabus transversis obliquis purpureo-albidis, costa alba, striga angulata discali argentea ; posticæ pallidiores, linea obliqua obscuriore.

Leucania littera, Guén. Noct. i. 71, 89.

a. Florida. Presented by E. Doubleday, Esq.

Group 2.

Like the second European group.

7. MYTHIMNA PSEUDARGYRIA.

Pallidissime cervina ; abdomen *cinerascens* ; alæ anticæ maculis duabus costalibus albidis lineis tribus transversis interruptis nigricantibus, 1a undulata, 2a duplicata guttulari, 3a guttulari ; posticæ cinereæ ciliis pallidis.

Leucania pseudargyria, Guén. Noct. i. 74, 94.

a—f. New York. Presented by E. Doubleday, Esq.

8. MYTHIMNA OBUSTA.

Rufo-cervina ; abdomen *testaceum* ; alæ posticæ pallide testaceæ, margine latissime cinereo-fusco.

Leucania obusta, Guén. Noct. i. 74, 95.

a. United States. Presented by E. Doubleday, Esq.

9. MYTHIMNA EBRIOSIA.

Rubricosa ; abdomen *cinerascens* ; alæ anticæ gutta discali punctisque submarginalibus albis ; posticæ cinereo-fuscæ, basi pallidiores, ciliis roseis.

Leucania ebriosa, Guén. Noct. i. 74, 96.

a. United States. Presented by E. Doubleday, Esq.

10. MYTHIMNA CONTRARIA.

Ferrugineo-rufa ; abdomen testaceum ; alæ anticæ subpurpurascens, lituris discalibus nigris testaceo conspersis, guttis marginalibus albidis ; posticæ albæ.

Ferruginous-red. Abdomen testaceous. Fore wings with a slight purplish tinge ; the usual discal mark blackish, speckled with testaceous ; a row of whitish marginal dots. Hind wings white. Length of the body 6 lines ; of the wings 14 lines.

a, b. New York. Presented by E. Doubleday, Esq.

11. MYTHIMNA TRIPARS.

Rufocervina, subtus pallida ; abdomen canum ; alæ anticæ litura discali oblonga transversa, guttis quinque exterioribus angularibus, gutta interiore guttaque basali canis fusco lineatis, costa cano conspersa fusco biguttata ; posticæ canæ, marginibus pallidissime fuscis.

Reddish fawn-colour, pale beneath. Abdomen hoary. Fore wings with a hoary oblong transverse discal mark, with five exterior angular dots, with an interior dot, and with a basal dot of the same hue ; these marks are interlined with brown ; costa with hoary speckles, which contain two brown dots. Hind wings hoary, with very pale brown borders. Length of the body 5 lines ; of the wings 12 lines.

a. United States. Presented by E. Doubleday, Esq.

12. MYTHIMNA VETUSTA.

Cana ; antennæ fulvæ ; abdomen testaceum ; alæ anticæ pallidissime testaceæ, litura discali arcuata pallide fusca, gutta interiore fusca punctisque vix distinctis exterioribus et marginalibus fuscis ; posticæ albæ.

Hoary. Antennæ tawny. Abdomen testaceous, except towards the base. Fore wings very pale testaceous, with a curved pale brown discal mark, with an interior brown dot, and with the usual exterior and marginal brown points, which are indistinct. Hind wings white. Length of the body 6 lines ; of the wings 14 lines.

a. Nova Scotia. From Lieut. Redman's collection.

South America.

13. MYTHIMNA ARGILLACEA.

Mas. *Cervina*; *alæ apud margines fuscescentes*; *alæ luteo-cervinæ, lineolis transversis nigricantibus, punctisque duabus discalibus albis.*

Aletia argillacea (Noctua gemina, Heliophila lineata), *Hübner. Samml. Exot. Schmett. ii. 32, 200, f. 399, 400.*

Bahia.

Africa.

Group 1.

Like the first European group.

14. MYTHIMNA CLAUDICANS.

Luteo-cervina; *abdomen nigro conspurcatum*; *alæ anticæ subconspersæ, lineis duabus medianis distinctis nigricantibus, maculis duabus discalibus albis nigro marginatis*; *posticæ margine lato pallide ferrugineo.*

Leucania claudicans, *Guén. Noct. i. 72, 91.*

Abyssinia.

Asia.

15. MYTHIMNA? LUTEOMACULATA.

Alæ anticæ luteo-obsolete cinereoque variæ, maculis duabus rotundatis luteis cinereo pupillatis, ante marginem externum serie, punctorum nigrorum; *posticæ cinereæ.*

Mythimna luteomaculata, *Bremer und Grey, Beitr. zur Schmett. Fauna des Nordlichen China's, 17, 86.*

North China.

Genus 4. LEUCANIA.

Corpus robustum. Proboscis brevis. Palpi validi, pilosi, oblique ascendentes, caput superantes; articulus 3us gracilis,

longi-conicus, 2i quadrante non longior. Antennæ sat graciles. Abdomen alas posticas plus minusve superans. Pedes sat robusti; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ medio-criter latæ, anticæ sæpissime testaceæ, subacuminatæ, maculis ordinariis nullis, apud costam rectæ, margine exteriori subobliquo. Larva cylindrica, glabra, pallida, per diem latens, multilineata. Pupa terra sepulta. *Mas.*—Antennæ subserratæ. *Fæm.*—Antennæ simplices.

Leucania, p., *Ochs. Syst. Gloss. Schmett. Eur.* iv.; *Treits.*; *Meig.*; *Boisd.*; *Guénée, Ann. Soc. Ent. Fr.* vi. 338; *Noct.* i. 69; *Herr.-Schæff. Eur. Schmett.* ii. 227.

Symira, Calamia, et Leucania, *Hübner. Verz. Schmett.* 240, 241.

Leucania et Calamia, *Steph. Cat. Brit. Lep.* 123, 124.

Body stout. Proboscis short. Palpi stout, pilose, obliquely ascending, extending beyond the head; third joint slender, elongate-conical, about one-fourth of the length of the second, or shorter. Antennæ rather slender. Abdomen extending more or less beyond the hind wings. Legs rather stout; hind tibiæ with four moderately long spurs. Wings moderately broad. Fore wings generally testaceous, straight in front, slightly acuminate at the tips, slightly oblique along the exterior border; fourth inferior vein remote from the other three, which are nearly contiguous at the base. *Male.*—Antennæ slightly serrated. *Female.*—Antennæ simple.

Europe.

Group 1.

Alæ anticæ testaceæ, plus minusve vittatæ et lineatæ, striga aut gutta discali alba.

Fore wings testaceous or fawn-colour, with more or less stripes and lines, and with a white discal streak or dot.

Subgroup 1.

Alæ anticæ subacuminatæ, pallide cervinæ, vittis cinereis et rufescentibus, gutta discali alba, margine exteriori subobliquo; posticæ albidæ.

Fore wings pale fawn-colour, slightly pointed, very slightly oblique along the exterior border, with grayish and reddish streaks, and with a discal white dot.

1. LEUCANIA DACTYLIDIS.

Alæ anticæ pallide fusco rubricantes, atomis obscurioribus conspersæ, puncto medio albido strigaeque arcuata obsoleta punctorum fuscorum; posticæ nivæ.

Leucania dactylidis, Ramb. Boisd. Ind. Méth. 133, 1066. Dup. Hist. Nat. Lep. Fr. Suppl. iv. 226, pl. 69; ii. 231, 147. Herr.-Schæff. Eur. Schmett. 318; ii. Noct. pl. 63. Guén. Noct. i. 76, 99.

South France.

2. LEUCANIA SCIRPI.

Pallidissime cervina; alæ anticæ guttis discalibus lineaque exteriore e punctis, necnon punctis marginalibus nigris, gutta discali alba, striga discali margineque exteriore subfuscescentibus; posticæ albæ.

Leucania Scirpi, Boisd. Ind. Méth. 133, 1065. Dup. Hist. Nat. Lep. Fr. Suppl. iii. 349, pl. 32. Guén. Noct. i. 76, 100.

Leucania Caricis, Herr.-Schæff. Eur. Schmett. ii. 231, 148; ii. Noct. pl. 64, f. 324, 325.

a, b. Europe. From M. Becker's collection.

3. LEUCANIA MONTIUM.

L. Scirpi affinis at gracilior et angustior; alæ anticæ pallide cinereo-rufescentes, atomis minimis obscuris adpersæ, puncto medio albido strigaeque arcuata obsoleta fusca vix interrupta; posticæ albidæ, venis margineque obscurioribus.

Leucania montium, Boisd. Ind. Méth. 133, 1067. Frey. Neu. Beit. Schmett. v. pl. 395. Herr.-Schæff. Eur. Schmett. ii. 231, 149; ii. Noct. pl. 63, f. 317. Guén. Noct. i. 76, 101.

Swiss Alps.

Subgroup 2.

Alæ anticæ vix acuminatæ, non vittatæ, puncto discali albo punctisque exterioribus nigris.

Fore wings hardly acuminate, not striped, with a white discal point, and with exterior black points.

4. LEUCANIA CYPERI.

L. Scirpi affinis ; *alæ anticæ pallide luteo-rufescentes, vena media albida subdilatata, puncto medio albido adjecto minore nigro ; posticæ albidæ, margine anguste fuscescente.*

Leucania Cyperi, *Boisd. Ind. Méth.* 133, 1064. *Guén. Noct.* i. 77, 102.

Calabria.

5. LEUCANIA ZEÆ.

Pallide cervina ; alæ anticæ, puncto discali albo lineisque duabus transversis e punctis nigris, 1a obliqua antice retracta, 2a marginali ; posticæ albidæ.

Leucania Zeæ, *Dup. Hist. Nat. Lép. Fr.* vii. 363, pl. 122, f. 4.
Meig. Syst. Besch. Eur. Schmett. iii. 167, 3, pl. 122, f. 4.
Boisd. Ind. Méth. 132, 1050. *Guén. Ann. Soc. Ent. Fr.* vi. ;
Noct. i. 77, 103. *Herr.-Schæff. Eur. Schmett.* ii. 232, 15 ; ii.
Noct. pl. 62, f. 315.

South France.

Var. Leucania Caricis, *Kindermann, MSS.*

South Russia.

a, b. Europe. From M. Becker's collection.

6. LEUCANIA ALBIVENA.

Alæ anticæ pallidæ cinereo subluteæ, in medio infuscatæ, venis subalbidis, puncto discali albo, intus nigro notato, serie transversa incurvata punctorum nigrorum parvorum ; posticæ albo-subcinereæ.

Leucania albivena, *DeGraslin, Ann. Soc. Ent. Fr.* 2me Sér. x. 409, 1, pl. 8, No. 1, f. 1.

Species distincta ?

West Coast of France.

Group 2.

Alæ sæpissime tenuiores, angustiores.

Wings much like those of the first group in colour, but generally narrower and more slight.

Subgroup 1.

Alæ anticæ subacuminatæ, pallide testaceæ aut pallide cervinæ, puncto discali albo.

Fore wings slightly acuminate, pale testaceous or pale fawn-colour, with a discal white point.

7. LEUCANIA HERRICHII.

Pallide rubescens; abdomen pallide testaceum; alæ anticæ fasciis incompletis diffusis cinereis, puncto discali albo; posticæ albæ, cinereo marginatæ.

Leucania Herrichii, *Frivaldsky; Herr.-Schæff. Eur. Schmett.* ii. 238, 169; ii. *Noct.* pl. 66, f. 341. *Guén. Noct.* i. 79, 108.

District of the Bosphorus.

8. LEUCANIA PUNCTOSA.

Cervina; caput et thorax fasciis fuscis; alæ anticæ striga discali margineque exteriori fuscis, gutta discali lineolis exterioribus punctisque marginalibus albis, gutta interiori lineaque e punctis transversa arcuata exteriori nigris; posticæ albidæ margine fuscescente.

Simyra punctosa, *Treit. Schmett.* v. 2, 287, 4; *Suppl.* 94.

Leucania punctosa, *Meig. Syst. Besch. Eur. Schmett.* iii. 167, 4, pl. 108, f. 11. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 80, 109. *Herr.-Schæff. Eur. Schmett.* ii. 235, 161; ii. *Noct.* pl. 61, f. 310.

South France.

a, b. Europe. From M. Becker's collection.

9. LEUCANIA PUTRESCENS.

Testacea; abdomen pallidum; alæ anticæ nigro conspersæ et guttatæ, vittis rufescentibus, gutta discali albida; posticæ subtestaceæ, punctis marginalibus nigris.

Noctua putrescens, *Geyer, Samml. Eur. Schmett.* 730, 731.

Leucania putrescens, *Herr.-Schæff. Eur. Schmett.* ii. 235, 160; ii. *Noct.* pl. 64, f. 327, 328. *Guén. Noct.* i. 80, 110.

Leucania punctosa, *Boisd. Ind. Méth.* 132, 1058. *Guén. Ann. Soc. Ent. Fr.* vi. 237.

Leucania Boisduvalii, *Dup. Hist. Nat. Lep. Fr.* iv. 79, pl. 105.

Leucania Caricis? *Treit. Schmett. Eur. Suppl.* 91.

South France.

10. LEUCANIA OBSOLETA.

Pallide cervina; abdomen testaceo-albidum; alæ anticæ nigro raro punctatæ, venis albis fusco marginatis, gutta discali alba, linea perobliqua exterior e guttis nigris; posticæ albæ, margine pallide fuscescente.

———, *Engr. Pap. d'Eur.* 503, c.

Noctua obsoleta, *Hübner. Samml. Eur. Schmett. Noct.* pl. 48, f. 233.

Leucania obsoleta, *Treit. Schmett. Eur.* v. 2, 301, 6; *Suppl.* 93.

Dup. Hist. Nat. Lep. Fr. vii. 77, pl. 105, f. 5. *Meig. Syst.*

Besch. Eur. Schmett. iii. 169, 8, pl. 108, f. 13. *Steph. Ill.*

Brit. Haust. iii. 74; *Cat. Brit. Lep.* 124. *Westw. & Humph.*

Brit. Moths, i. 217, pl. 47, f. 5. *Boisd. Ind. Méth.* 133, 1061.

Guén. Ann. Soc. Ent. Fr. vi. 237; *Noct.* i. 81, 112. *Herr.-*

Schæff. Eur. Schmett. ii. 234, 159; ii. *Noct.* pl. 60, f. 303—

306.

a. England. Presented by J. C. Dale, Esq.

b—g. England. Presented by Mr. Longley.

h—p. England. From Mr. Stephens' collection.

Subgroup 2.

Alæ anticæ linea alba furcata.

Fore wings with a forked white line.

11. LEUCANIA LOREYI.

Pallide cervina; abdomen pallide testaceum; alæ anticæ linea tenui discali punctisque marginalibus nigris, striga exterior discali nigricante guttaque intermedia alba.

Leucania Loreyi, *Dup. Hist. Nat. Léop. Fr.* iv. 81, pl. 105, f. 7.

Frey. Neu. Beit. Schmett. iv. pl. 413. *Boisd. Ind. Méth.* 133,

1060. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 84, 121.

Herr.-Schæff. Eur. Schmett. ii. 233, 155; ii. *Noct.* pl. 61, f.

309; pl. 62, f. 314.

South France. Spain. Brazil. Java.

12. LEUCANIA LITTORALIS.

Pallide cervina ; abdomen testaceum ; alæ anticæ linea discali alba furcata nigricante marginata, striga postica nigricante strigisque exterioribus fuscis ; posticæ candidæ.

Leucania littoralis, Curt. Brit. Ent. pl. 157. Steph. Ill. Brit. Haust. iii. 74 ; Cat. Brit. Lep. 124. Guén. Noct. i. 85, 123.

Leucania comma, var. ? Boisd. Ind. Méth. 132, 1052. Guén. Ann. Soc. Ent. Fr. 237.

a. England. From Mr. Carter's collection.

b—e. England. From Mr. Stephens' collection.

f, g. Europe. From M. Becker's collection.

13. LEUCANIA VELUTINA.

Cinerea ; alæ anticæ linea furcata alba, fascia exterior obliqua canescente, strigis submarginalibus nigricantibus ; posticæ canescentes margine lato cinereo.

Leucania velutina, Eversm. Bull. Soc. Imp. Nat. Mosc. 1846, pl. 2, f. 5. Herr.-Schæff. Eur. Schmett. ii. 230, 144 ; ii. Noct. pl. 71, f. 362, 363. Guén. Noct. i. 85, 124.

South Russia.

14. LEUCANIA PUDORINA.

Pallidissime cervina ; abdomen basi album ; alæ anticæ punctis nigris aspersæ, venis albis ; posticæ albæ.

Noctua pudorina, Wien. Verz. 85, 11. Hübn. Samml. Eur. Schmett. Noct. pl. 86, f. 401—405. Treit. Schmett. Eur. ii. 299 : Suppl. x. 94.

Leucania pudorina, Dup. Hist. Nat. Lép. Fr. vii. 75, pl. 105, f. 4. Meig. Syst. Besch. Eur. Schmett. iii, 168, 7, pl. 108, f. 12. Steph. Ill. Brit. Haust. iii. 80 ; Cat. Brit. Lep. 123 ; Westw. and Humph. Brit. Moths, i. 218, pl. 47, f. 13, 14. Boisd. Ind. Méth. 1049. Guén. Ann. Soc. Ent. Fr. vi. 237 ; Noct. i. 86, 125. Herr.-Schæff. Eur. Schmett. ii. 233, 154 ; ii. Noct. 65, f. 329, 331.

a—f. England. Presented by E. Doubleday, Esq.

g—o. England. From Mr. Stephens' collection.

p—u. Europe. From M. Becker's collection.

15. LEUCANIA IMPUDENS.

Testacea; abdomen albidum; alæ anticæ luteo conspersæ, albo cinereoque lineatæ; posticæ cinereæ, ciliis albidis.

Noctua impudens, *Hübner. Samml. Eur. Schmett. ii. Noct. 11, f. 229* (329, erratim).

Leucania impudens, *Guén. Noct. i. 86, 126.*

Leucania pudorina, *var., Herr.-Schæff. Eur. Schmett. ii. 233.*

Europe.

Subgroup 3.

Alæ anticæ fusco nebulosæ, striga basali nigra, linea discali alba.

Fore wings shaded with brown, adorned with a basal black streak, and with a white discal line.

16. LEUCANIA COMMA.

Pallidissime cervina; alæ anticæ costa venaque discali albidis, striga basali lineolisque submarginalibus nigris; posticæ cinereæ, basi albidæ.

———, *Engr. Pap. d'Eur. 504, a—f.*

Phalæna-Noctua Comma, *Linn. Syst. Nat. 2, 850, 156; Faun. Suec. 1191. Gmel. ed. Syst. Nat. i. 5, 2567, 156.*

Noctua Comma, *Fabr. Mant. Ins. ii. 183, 103; Ent. Syst. iii. 2, 106, 318. Wien. Verz. 76, 9. Bork. Eur. Schmett. iv. 708, 343. Kleem, Beit. Ins. Ges. i. pl. 24, f. 1—6. Haw. Lep. Brit. 38.*

Leucania Comma, *Treit. Schmett. Eur. v. 2, 302, 7. Dup. Hist. Nat. Lep. Fr. vii. 83, pl. 106, f. 1. Meig. Syst. Besch. Eur. Schmett. iii. 169, 9, pl. 108, f. 7. Steph. Ill. Brit. Haust. iii. 71; Cat. Brit. Lep. 123. Westw. & Humph. Brit. Moths, i. 216, pl. 47, f. 2. Boisd. Ind. Méth. 132, 1051. Guén. Ann. Soc. Ent. Fr. vi. 237; Noct. i. 86, 128. Herr.-Schæff. Eur. Schmett. ii. 233, 156.*

a, b. England. Presented by E. Doubleday, Esq.

c—k. England. From Mr. Stephens' collection.

l—o. England.

p. Europe. From M. Becker's collection.

17. LEUCANIA LINEATA.

Fusco-testacea; alæ anticæ costa media versus marginem interiorem late nigro terminata, areolis 2—4 basi nigris; posticæ fusco-cinereæ.

Leucania lineata, Eversm. *Bull. Soc. Imp. Nat. Mosc.* 1842; *Faun. Volg-Ural.* 266. *Herr.-Schæff. Eur. Schmett.* ii. 234, 157, pl. 72, f. 368, 369. *Guén. Noct.* i. 87, 129.

Sarepta.

18. LEUCANIA ANDERREGGII.

“Fusco-testacea, aut testaceo-fusca; alæ anticæ costa media versus marginem interiorem nigro terminata, areola 4a fere omnino, 5a et 6a limbum versus nigris; posticæ fusco-cinereæ.”—Herr.-Schæff.

Leucania Anderreggii, Boisd. *Ind. Méth.* 87, 1050. *Frey. Neu. Beit. Schmett.* v. pl. 395. *Guén. Noct.* i. 87, 130.

Leucania Anderreggii? *Herr.-Schæff. Eur. Schmett.* ii. 234, 158; ii. *Noct.* pl. 60, 64, f. 302, 326.

Swiss Alps.

19. LEUCANIA ALOPECURI.

Alæ anticæ pallide stramineæ linea media obsoleta, radiis apicalibus fimbriaque fuscis, puncto medio albo ad apicem areolæ punctulo nigro adjecto; posticæ albidæ. Fœm.—Linea media fusca nulla, punctis plurimis exterioribus biseriatis.

Leucania Alopecuri, Boisd. *Ind. Méth.* i. 32, 1057. Eversm. *Faun. Volg-Ural.* 267. *Frey. Neu. Beit. Schmett.* iv. pl. 359. *Herr.-Schæff. Eur. Schmett.* ii. 231, 150; ii. *Noct.* pl. 72, f. 369. *Guén. Noct.* i. 87, 131.

Sarepta.

20. LEUCANIA ALBIRADIOSA.

Alæ anticæ pallide straminæ, vena mediana a basi ad fimbrias usque alba, supra infraque nigro limitata; posticæ albæ.

Leucania albiradosa, Eversm. *Bull. Soc. Imp. Nat. Mosc.* 1852, 1, 158, 7.

Lower Wolga.

Subgroup 4.

Alæ anticæ linea angulata alba.

Fore wings with an angular white line.

21. LEUCANIA L-ALBUM.

Testaceo-albida; thorax nigro conspersus; alæ anticæ strigis duabus basalibus strigulisque exterioribus nigro-fuscis, striga discali alba apice hamata, venis versus marginem exteriorem albidis; posticæ albidæ, extus subfuscescentes.

—————, *Engr. Pap. d'Eur.* 503, a, d.

Phalæna-Noctua L-album, *Gmel. ed. Syst. Nat.* i. 5, 2540, 154.

Noctua L-album, *Wien. Verz.* 85, 9. *Fabr. Sp. Ins.* ii. 226, 87; *Mant. Ins.* ii. 158, 159; *Ent. Syst.* iii. 272, 205. *Esp. Schmett.* pl. 90, f. 3, 4. *Bork. Eur. Schmett.* iv. 706, 312. *Hübner. Samml. Eur. Schmett. Noct.* pl. 47, f. 227; *Beitr.* pl. 2, K.

Leucania L-album, *Treit. Schmett. Eur.* v. 2, 306, 8. *Dup. Hist. Nat. Lép. Fr.* vii. 70, pl. 105, f. 2. *Meig. Syst. Besch. Eur. Schmett.* iii. 170, 10, pl. 108, f. 9; *Handb.* 169, 56. *Boisd. Ind. Méth.* 132, 1056. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 89, 134. *Herr.-Schæff. Eur. Schmett.* ii. 230, 146.

a—c. Europe. From M. Becker's collection.

Subgroup 5.

Alæ anticæ testaceæ, vix signatæ.

Fore wings testaceous, hardly marked.

22. LEUCANIA RIPARIA.

Statura L. L-album eique affinis; alæ anticæ supra albo-roseæ, fusco luteoque variæ, fascia ad apicem obliqua dilutiore; punctorum nigrorum serie transversa interrupta; vena media ramis quibusdam albo-luteolis; alæ subtus nigricantes.

Leucania riparia, *Ramb. Ann. Sci. d'Obs.* 1829, 261, pl. 6, f. 3; *Ann. Soc. Ent. Fr.* i. 288, pl. 9, f. 1. *Boisd. Ind. Méth., err. et add.* 132, 1055. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 339, pl. 31. *Herr.-Schæff. Eur. Schmett.* ii. 236, 165; ii. *Noct.* pl. 61, 62, f. 308, 316. *Guén. Noct.* i. 91, 140.

South France. Corsica.

23. LEUCANIA CONGRUA.

Similis L. obsoletæ; alæ anticæ supra luteo-rufæ, vena media in punctum dilatata; serie transversa punctorum nigrorum obliqua interrupta, vix incurvata, aliquando fere nulla; alæ posticæ fusco-luteolæ; omnes subtus margaritacæ.

Leucania amnicola, Ramb. Ann. Sci. d'Obs. 1829, 162, pl. 6, f. 5; Anu. Soc. Ent. Fr. i. 289, pl. 9, f. 2; Collect. Icon. Chen. d'Eur. (Larva). Boisd. Ind. Méth. 133, 1062. Guén. Ann. Soc. Ent. Fr. vi. 237. Dup. Hist. Nat. Léop. Fr. Suppl. iii. 336, pl. 31. Herr.-Schæff. Eur. Schmett. ii. 236, 166; ii. Noct. pl. 65, f. 334.

Noctua congrua? Hübn. Samml. Eur. Schmett. f. 616.

Leucania congrua, Treit. Suppl. x. 92. Boisd. Ind. Méth. 132, 1054. Herr.-Schæff. Eur. Schmett. ii. 237, 167; Noct. pl. 70, f. 357, 360. Guén. Noct. i. 91, 141.

South France, Corsica, Sicily, Hungary.

24. LEUCANIA SICULA.

Ochraceo-testacea; alæ anticæ ciliis obscurioribus, puncto discali albo basim versus acute terminato, venis æqualiter pallidioribus fusco cinctis, 5a utrinque nigro cincta, punctis lineæ limbalis obsoletis.

Leucania sicula, Treit. Schmett. Eur. Suppl. x. 90. Boisd. Ind. Méth. 133, 1063. Guén. Ann. Soc. Ent. Fr. vi. 237; Noct. i. 91, 142. Herr.-Schæff. Eur. Schmett. ii. 232, 152; ii. Noct. pl. 66, f. 340.

Sicily.

25. LEUCANIA STRAMINEA.

Pallidissime cervina; abdomen albidum; alæ anticæ punctis nigris raro conspersæ, guttis tribus in lineam transversam exterioribus nigris; posticæ albidæ, linea obliqua discali e guttis nigricantibus.

Leucania straminea, Treit. Schmett. Eur. v. 2, 297; Suppl. x. 89. Boisd. Ind. Méth. 133, 1069. Dup. Hist. Nat. Léop. Fr. Suppl. iii. 346, pl. 32, f. 2. Frey. Neu. Beit. Schmett. ii. pl. 123. Herr.-Schæff. Eur. Schmett. ii. 236, 164; iii. Noct. pl. 63, 64, f. 321—323. Guén. Ann. Soc. Ent. Fr. vi. 237; Noct. i. 91, 143. Steph. Cat. Brit. Lep. 124.

Nonagria Vectis, *Curt. Brit. Ent.* x. pl. 459.

Nonagria? Vectis, *Steph. Ill. Brit. Ent. Haust.* iv. 390.

a, b. England. Presented by S. Stevens, Esq.

c. England. From Mr. Carter's collection.

d—l. England. From Mr. Stephens' collection.

m. England.

n—q. Europe. From M. Becker's collection.

Var.? *Pallidior*.

r—u. New York. Presented by E. Doubleday, Esq.

26. LEUCANIA IMPURA.

Pallidissime cervina; alæ anticæ vitta discali obscuriore, nigro obsolete punctatæ, guttis 1—3 discalibus nigris; posticæ pallide fuscescentes, apud costam albidæ margaritacæ, ciliis albis.

———, *Albin, Nat. Hist. Engl. Ins.* pl. 33, f. 3. *Engr.*

Pap. d'Eur. 505, a—c.

Noctua impura, *Hübner, Samml. Eur. Schmett. Noct.* pl. 85, f. 396.

Leucania impura, *Treit. Schmett. Eur.* v. 2, 294, 3; *Suppl.* 89.

Dup. Hist. Nat. Léop. Fr. vii. pl. 105, f. 3. *Meig. Syst. Besch.*

Eur. Schmett. iii. 168, 6, pl. 108, f. 8. *Steph. Ill. Brit. Ent.*

Haust. iii. 75; *Cat. Brit. Lep.* 123. *Westw. & Humph. Brit.*

Moths, i. 216, pl. 47, f. 3, 4. *Boisd. Ind. Méth.* 133, 1070.

Herr.-Schæff. Eur. Schmett. Noct. i. 92, 144; ii. 235, 163; ii.

Noct. pl. 63, f. 319, 320. *Guén. Ann. Soc. Ent. Fr.* vi. 237;

Noct. i. 92, 144.

Noctua fuliginosa, *Haw. Lep. Brit.* 39.

Noctua punctina, *Haw. Lep. Brit.* 40.

Leucania punctina, *Steph. Ill. Brit. Ent. Haust.* iii. 75. *Wood, I.*

E. pl. 15, f. 563.

a—c. England. Presented by W. Wing, Esq.

d—n. England. From Mr. Stephens' collection.

o. England.

p—v. Europe. From M. Becker's collection.

27. LEUCANIA PALLENS.

Pallidissime cervina; abdomen pallide testaceum aut albidum; alæ anticæ punctis tribus aut duobus discalibus nigris, venis albidis; posticæ maris albæ, fœminæ fuscescentes.

———, *Engr. Pap. d'Eur.* 505, d, e. *Deg. Ins.* ii. pl. 7, f. 14.

Phalæna-Noctua pallens, *Linn. Faun. Suec.* 1175. *Gmel. ed. Syst. Nat.* i. 5, 2532, 107. *Clerck, Icon.* pl. 4, f. 6.

Noctua pallens, *Wien. Verz.* 85, 10. *Fabr. Sp. Ins.* ii. 214, 26; *Mant. Ins.* ii. 139, 36; *Ent. Syst.* iii. 2, 22, 47. *Esp. Schmett.* pl. 90, f. 1. *Bork. Eur. Schmett.* iv. 712, 314. *Hübner. Samml. Eur. Schmett. Noct.* pl. 48, f. 234; *Beitr.* pl. 2, 4. *Haw. Lep. Brit.* 42.

Leucania pallens, *Treit. Schmett. Eur.* v. 2, 290, 1. *Dup. Hist. Nat. Léop. Fr.* vii. 4, 68, pl. 105, f. 1. *Meig. Syst. Besch. Eur. Schmett.* iii. 167, 5, pl. 108, f. 6; *Handb.* 169, 54. *Guén. Noct.* i. 92, 145. *Boisd. Ind. Méth.* 133, 1073. *Herr.-Schæff. Eur. Schmett.* ii. 235, 162. *Steph. Ill. Brit. Ent. Haust.* iii. 76; *Cat. Brit. Lep.* 124. *Westw. & Humph. Brit. Moths*, i. 217, pl. 47, f. 7, 8.

a—r. England. From Mr. Stephens' collection.

s—w. England.

x. Scotland. From Mr. Foxcroft's collection.

y—z. Europe. From M. Becker's collection.

28. LEUCANIA ECTYPA.

Alæ anticæ lutescentes, venis albis; posticæ albidæ, fascia marginæque subcinereis.

Noctua Ectypa, *Hübner. Samml. Eur. Schmett. Lep.* iv. *Noct.* ii. f. 231.

Leucania pallens, *var.*, *Herr.-Schæff. Eur. Schmett.* ii. 235, 162.

Leucania ectypa, *Guén. Noct.* i. 94, 146.

Europe.

29. LEUCANIA FURCATA.

Cinnamomeo-testacea; alæ anticæ venis albis; posticæ albæ.

Leucania furcata, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837; *Faun. Volg-Ural.* 264. *Herr.-Schæff. Schmett. Eur.* ii. 230, 145; ii. *Noct.* pl. 71, f. 364. *Guén. Noct.* i. 94, 147.

Ural District.

30. LEUCANIA VERECUNDA.

Alæ anticæ levissime e virescente pallide lutescentes, concolores; posticæ sordide lutescentes, concolores.

Leucania verecunda, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xxi. 3, 219, 10. *Guén. Noct.* i. 94, 148.

South West Ural Mountains.

Group 3.

Corpus gracilius. *Alæ anticæ latiores, unicolores, margine exteriore subundulato, subobliquo.*

Calamia, *Hübner*; *Steph. Cat. Brit. Lep.*

Body more slender than in the other groups. Fore wings of one colour, unvaried, rather broader than usual, indistinctly undulating, and very slightly oblique along the exterior border.

31. LEUCANIA PHRAGMITIDIS.

Pallidissime cervina; thorax antice albus; alæ anticæ apud costam pallidiores, venis albidis; posticæ pallide cinerascetes.

Noctua Phragmitidis, *Hübner. Samml. Eur. Schmett. Noct.* pl. 47, f. 230.

Nonagria Phragmitidis, *Treit. Schmett. Eur.* v. 2, 317, 5.

Leucania Phragmitidis, *Dup. Hist. Nat. Léop. Fr.* vii. 90, pl. 106, f. 5. *Meig. Syst. Besch. Eur. Schmett.* iii. 170, 12, pl. 108, f. 15. *Boisd. Ind. Méth.* 134, 1074. *Herr.-Schæff. Eur. Schmett.* ii. 229, 143. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 94, 149.

Leucania musculosa, *Steph. Ill. Brit. Haust.* iii. 81. *Westw. and Humph. Brit. Moths*, i. 47, pl. 16; pl. 48, f. 1.

Noctua semicana, *Esp. Schmett.* pl. 189, f. 5.

Calamia Phragmitidis, *Hübner. Verz. Schmett.* 240. *Steph. Cat. Brit. Lep.* 124.

a, b. England. Presented by — Whitwell, Esq.

c, d. England. Presented by E. Doubleday, Esq.

e—m. England. From Mr. Stephens' collection.

North America.

Group 1.

Like the first European group.

Subgroup 1.

Statura sat magna. Alæ anticæ acutæ.

Size rather large. Fore wings acute.

32. LEUCANIA EXTRANEA.

Pallide cervina; alæ anticæ punctis subobsoletis saturatioribus aut nigris, linea e punctis nigris obliqua antice retracta, striga subapicali obliqua fusca; posticæ fuscescentes, ciliis albis.

Leucania extranea, Guén. Noct. i. 77, 104.

a, b. United States. Presented by Major-General Hardwicke.

c, d. Georgia. From Mr. Milne's collection.

e, f. Florida. Presented by E. Doubleday, Esq.

g. South America. Presented by C. Darwin, Esq.

h. Orilla, West Canada. From Mr. Bush's collection.

Var. β . *Minor; alæ posticæ albæ, margine sæpissime fuscescente.*

i—n. Venezuela. From Mr. Dyson's collection.

o. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

Var. γ . *Pallidior; alæ anticæ puncto nullo discali albo.*

p—s. North India. From Mr. Stevens' collection.

t. Nepaul. Presented by Major-General Hardwicke.

Var. δ . Var. γ . *similis; alæ anticæ nonnunquam obscuriores; posticæ margine obscuriore.*

v, u. Sydney. From Mr. Lambert's collection.

w. New Holland. Presented by J. Hunter, Esq.

Var. ϵ . Var. α . *simillima, magnitudine varia; alæ anticæ colore variæ, puncto nullo discali albo.*

x, y. New Zealand. Presented by Dr. Sinclair.

z. New Zealand. Presented by the Rev. W. Colenso.

aa—gg. New Zealand. Presented by Col. Bolton.

Perhaps two or three species may be here included under the name of *L. extranea*.

Subgroup 2.

Statura parva. Corpus gracilius. Alæ anticæ cervinæ, nigro conspersæ.

Size small. Body more slender. Fore wings fawn-colour, speckled with black.

33. LEUCANIA VIDENS.

*Cervina; abdomen cinerascens; alæ anticæ apud venas nigro punctatæ, striga nigra guttaque alba discalibns, guttis ciliari-
bus albis; posticæ albæ.*

Leucania videns, Guén. Noct. i. 78, 106.

a. Florida. Presented by E. Doubleday, Esq.

34. LEUCANIA EXTINCTA.

Pallidissime cervina; abdomen albidum; alæ anticæ nigro punctatæ, vitta tenui discali nigra albo interlineata nonnunquam. subobsoleta, lineis duabus transversis exterioribus e guttis nigris; posticæ albæ aut albidæ, marginibus obscurioribus nigro guttatis.

Leucania extincta, Guén. Noct. i. 79, 107.

a—d. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

35. LEUCANIA DIFFUSA.

Testacea; thorax fasciis anticis fuscescentibus; alæ anticæ costa fuscescente, vitta discali pallide fusca lineam albidam lineamque interruptam nigricantem includente, gutta antica nigra strigaque albida subapicali obliqua; posticæ albæ, marginibus testaceis.

Testaceous. Thorax with some brownish bands in front. Fore wings slightly brownish along the costa, and with a pale brown discal stripe, which has a black dot in front, and includes a whitish line and a blackish line; the latter is interrupted; a whitish subapical oblique streak. Hind wings white with testaceous borders. Length of the body 5 lines; of the wings 11 lines.

a. Nova Scotia. From Lieut. Redman's collection.

Group 2.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

36. LEUCANIA INSUETA.

Pallide cervina; abdomen pallidissime cervinum; alæ anticæ vitta diffusa margineque exteriore fuscescentibus, linea discali furcata alba lineisque duabus transversis exterioribus e punctis nigris; posticæ cinereæ, aut albidæ cinereo marginatæ.

Leucania insueta, Guén. Noct. i. 81, 113.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.
e. Nova Scotia. From Lieut. Redman's collection.

Var. *Testacea; alæ anticæ nigro conspersæ, vitta diffusa discali fuscescente strigam albidam brevissimam includente, guttis exterioribus fuscis punctisque marginalibus nigris; posticæ albidæ, testaceo marginatæ.*

Testaceous. Fore wings speckled with black, and having a diffused brownish discal stripe, which contains a very short whitish streak; the usual exterior brown dots and black marginal points. Hind wings whitish with testaceous borders. Length of the body $4\frac{1}{2}$ lines; of the wings 11 lines.

f. Florida. Presented by E. Doubleday, Esq.

37. LEUCANIA LINITA.

Pallidissime cervina; abdomen albidum; alæ anticæ subfalcatae, nigro parce conspersæ, striga brevi nigra guttuque albida discalibus, lineis duabus transversis exterioribus e punctis nigris, margine exteriore recto; posticæ albæ.

Leucania linita, Guén. Noct. i. 81, 114.

a—g. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

38. LEUCANIA JUNCICOLA.

Var.? *Pallide testacea; thorax lineis quatuor transversis nigricantibus; alæ anticæ guttis duabus discalibus, guttis exterioribus punctisque marginalibus nigris; posticæ pallide cinereæ; tibiæ calcaribus basi nigro guttatis.*

Leucania juncicola, Boisd. MSS. Guén. Noct. i. 83, 119.

North America.

Var.? Pale testaceous. Thorax with four blackish transverse lines. Fore wings with a black dot near the base of the fourth inferior vein, another at the base of the first inferior vein, and a few more forming a transverse exterior line; exterior margin with black points. Hind wings pale cinereous. Spurs of the tibiæ with black dots at the base. Length of the body 6 lines; of the wings 14 lines.

a. United States. Presented by E. Doubleday, Esq.

39. LEUCANIA SCIRPICOLA.

Pallide roseo-cervina; abdomen albidum; alæ anticæ nigro punctatæ, linea cinerea, lineola alba guttaque posteriore nigra discalibus, linea transversa obliqua exterior e guttis nigris; posticæ albidæ, marginibus pallide cervinis fusco punctatis.

Leucania scirpicola, Guén. Noct. i. 84, 120.

a—e. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.

Subgroup 2.

Like the third European subgroup.

40. LEUCANIA COMMOIDES.

Pallidissime cervina; abdomen albidum; alæ anticæ nigro vittatæ et albo lineatæ, lineis duabus transversis guttularibus strigisque fuscis; posticæ cinerascens, basi pallidiores, ciliis albidis.

Leucania commoides, Guén. Noct. i. 86, 127.

a, b. New York. Presented by E. Doubleday, Esq.

Subgroup 3.

Like the fourth European subgroup.

41. LEUCANIA MULTILINEA.

Pallide testacea; thorax nigro subconspersus, fascia cinerascens; alæ anticæ vittis duabus obscure fuscis, venis albis, areolis fusco strigatis, guttis quinque punctisque marginalibus nigris; posticæ albidæ, apud marginem exteriorem cinereæ nigro guttatæ.

Pale testaceous. Thorax with a grayish indistinct band, slightly speckled with black. Fore wings with two dark brown stripes, with the veins mostly white, with two pale brown streaks on each areolet, with five black dots, and with black points along the exterior border; interior border speckled with black. Hind wings whitish, cinereous towards the exterior border, which has a row of black dots. Length of the body 5 lines; of the wings 12 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

Subgroup 4.

Like the fifth European subgroup.

42. LEUCANIA PHRAGMITIDICOLA.

Var.? *Albida; alæ anticæ pallide roseæ, vitta testacea, vena mediana alba, lineis duabus exterioribus transversis guttularibus nigris, margine interiore nigro consperso; posticæ albæ, margine exteriori pallide roseo-cinereo guttis nigris.*

Leucania Phragmitidicola, Guén. Noct. i. 89, 136.

North America.

Var.? Whitish. Fore wings pale rose-colour, with a slight testaceous stripe, which extends from the base to the tip; median vein white; a black dot at the tip of the discal areolet, and two exterior transverse lines of black dots; interior border speckled with black. Hind wings white; exterior border pale rosy cinereous with black dots. Length of the body $4\frac{1}{2}$ lines; of the wings 12 lines.

a. St. Domingo. From Mr. Tweedie's collection.

West Indies

Group 1.

43. LEUCANIA DORSALIS.

Pallide testacea, subtus albida; thorax fasciis purpureo-ferrugineis; alæ anticæ venis albidis, areolis albido lineatis, guttis tribus discalibus punctisque marginalibus nigris; posticæ albæ, margine exteriori subcinereo guttis nigris.

Pale testaceous, whitish beneath. Thorax with several purplish ferruginous bands. Fore wings with whitish veins, and with two whitish lines on each areolet; three black dots on the disk, the usual one at the tip of the discal areolet, and two exterior; some black points along the exterior border. Hind wings white, with black dots along the exterior border, which is slightly cinereous. Length of the body $5\frac{1}{2}$ lines; of the wings 11 lines.

a. St. Domingo. From Mr. Tweedie's collection.

South America.

Group 1.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

44. LEUCANIA RIVORUM.

Thorax cinereo nebulosus; alæ anticæ flavescente-cinereæ, violaceo cinereo variæ, puncto discali punctisque exterioribus nigris; posticæ albæ opalinæ.

Leucania rivorum, Guén. Noct. i. 82, 115.

Brazil.

45. LEUCANIA IMPUNCTA.

Magna; thorax robustus; pedes valde villosi; alæ anticæ pallidissime ochraceæ, venarum marginibus vix obscurioribus; posticæ albæ, iridescentes, venis margineque nigricantibus.

Leucania impuncta, Guén. Noct. i. 83, 117.

Chili.

46. LEUCANIA SOLITA.

Pallidissime testacea; abdomen albidum; alæ anticæ vitta mediana alba subfusco marginata, gutta apud areolæ discalis apicem guttisque exterioribus nigris; posticæ albæ.

Very pale testaceous. Abdomen whitish. Fore wings with the median vein white, and with a brownish tinge along its border; the black dot at the tip of the discal areolet and the exterior black dots as usual. Hind wings white. Length of the body 6 lines; of the wings 12 lines.

a. ———? Presented by J. G. Children, Esq.

b. Honduras. From Mr. Miller's collection.

Subgroup 2.

Like the fourth European subgroup.

47. LEUCANIA ALBILINEA.

Mas. *Fusca; abdomen cinerascens; alæ anticæ vitta discali albida, ad costam subcinereæ; posticæ basi marginibusque testaceis.*

Leucania albilinea (Noctua genuina, Heliophila pallida), *Hübner. Samml. Exot. Schmett.* ii. 25, 169, f. 337, 338.

Buenos Ayres.

Leucania albilinea? *Guén. Noct.* i. 89, 135.

North America.

Subgroup 3.

Like the fifth European subgroup.

48. LEUCANIA HUMIDICOLA.

Stramineo-alba; abdomen maris pilosum, longissimum; pedes valde villosi; alæ anticæ sat angustæ, vena mediana alba fusco-olivaceo nebuloza, puncto discali nigro, plaga subapicali trigona fuscescente, punctis marginalibus nigris; posticæ albæ, opalinæ.

Leucania humidicola, *Guén. Noct.* i. 90, 137.

Cayenne.

49. LEUCANIA EXTENUATA.

Prothorax violaceo-cinereo marginatus; abdomen maris longum apice fasciculatum; alæ anticæ angustæ, flavescente-albo incarnatæ, albo et fuscescente radiatæ, vena mediana fuscescente nebulosa, macula apicali fuscescente; posticæ albæ, opalinæ, venarum apicibus margineque subcinereis.

Leucania extenuata, Guén. Noct. i. 90, 138.

Brazil.

50. LEUCANIA TAYAUDI.

Prothorax violaceo-cinereo marginatus; alæ anticæ angustæ, flavescente-albo incarnatæ, albo et fuscescente radiatæ, vena mediana alba, fuscescente nebulosa, puncto discali nigro, macula apicali fuscescente; posticæ albæ, opalinæ, venarum apicibus margineque subcinereis; abdomen maris non fasciculatum.

Leucania Tayaudi, Feisthamel, MSS. Guén. Noct. i. 90, 139.

Monte Video.

51. LEUCANIA LINEOLATA.

Alba; thorax pallide testaceus; alæ anticæ angulatæ, venis pallide testaceis, areolis testaceo lineatis, gutta discali fusca, margine exteriori recto.

White. Thorax pale testaceous. Fore wings rectangular at the tips, with pale testaceous veins, and with a single testaceous line on each areolet; a brown dot at the tip of the discal areolet; exterior border straight. Length of the body $4\frac{1}{2}$ lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

52. LEUCANIA ANTICA.

Pallide cervina; thorax fusco fasciatus; abdomen pallidissime cervinum; alæ anticæ costa margineque interiore nigro conspersis, guttis discalibus fuscis, fasciis exterioribus guttularibus nigris, margine exteriori antice fuscescente; posticæ albidæ guttis marginalibus nigris.

Pale fawn-colour. Thorax with several brown bands. Abdomen very pale fawn-colour. Fore wings with the costa and interior border, speckled with black, with some brown dots in the disk, with

the usual exterior band of black dots, which are more numerous than in most species, and with a brownish tinge on the fore part of the exterior border. Hind wings whitish, with the usual black marginal dots. Length of the body 6 lines; of the wings 12 lines.

a. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.

Group 1.

Like the second European group.

Subgroup 1.

Like the third European subgroup.

53. LEUCANIA TORRENTIUM.

Subrubescens; abdomen apud medium nigricans; palpi articulo 3o longiusculo, porrecto; alæ anticæ vitta discali interrupta obscura; macula discali alba nigro punctata, striga anteriore rufa; posticæ albidæ, subiridescentes, margine exteriori fusciscente.

Leucania torrentium, Guén. Noct. i. 88, 132.

Cape. Madagascar. Isle of France.

Subgroup 2.

Like the fourth European subgroup.

54. LEUCANIA AMENS.

Var. ? Pallidissime testacea; alæ anticæ nigro subconspersæ, venis posterioribus albis, cinereo submarginatis, vittis duabus (una antica, altera apud marginem interiorem) fulvescentibus, gutta discali nigra, guttis exterioribus subobsoletis, punctis marginalibus distinctis; posticæ albidæ, venis marginibusque cinereis.

Leucania amens, Guén. Noct. i. 88, 133.

Cape.

Var. ? Very pale testaceous. Fore wings slightly speckled with black, with the median vein and the inferior veins white, and

slightly bordered with gray; a slight tawny stripe in front, and another along the interior border; a black dot at the tip of the discal areolet; the exterior dots almost obsolete; the marginal points distinct. Hind wings whitish, with cinereous borders and veins. Length of the body 4—4½ lines; of the wings 9—10 lines.

a. South Africa. Presented by Dr. Smith.

b. Port Natal. From M. Gueinzius' collection.

55. LEUCANIA CURVULA.

Pallide testacea; thorax fasciis fuscescentibus; abdomen albidum; alæ anticæ nigro subconspersæ, vitta cinerascens, gutta discali alba, guttis exterioribus punctisque marginalibus nigris; posticæ albæ, subopalinæ.

Pale testaceous. Thorax with some brownish bands. Abdomen whitish. Fore wings very slightly speckled with black, paler in front of the slight grayish stripe, which is curved upward towards the tip of the wing; it has a black dot behind its interior side, and encloses the white dot at the tip of the discal areolet; an exterior transverse line of black dots, and the usual marginal black points. Hind wings white. Length of the body 5—6 lines; of the wings 12—14 lines.

a—d. Congo. Presented by Sir J. Richardson.

56. LEUCANIA PROMINENS.

Fœm. Pallidissime testacea; thorax cinereo unifasciatus; abdomen album; alæ anticæ nigro subconspersæ, vena mediana alba, gutta discali punctisque exterioribus nigris; posticæ albæ, marginibus nigro guttatis.

Female. Very pale testaceous. Thorax with a single cinereous band. Abdomen white. Fore wings minutely speckled with black, slightly darker about the median vein, which is white; a black dot at the tip of the discal areolet, and black points along the exterior border. Hind wings white, with black dotted borders. Length of the body 5 lines; of the wings 12 lines.

a, b. Congo. Presented by Sir J. Richardson.

57. LEUCANIA PLANA.

Pallide testacea; alæ punctis marginalibus nigris; anticæ venis albis fusco marginatis, striga interrupta posteriore strigisque exterioribus fuscis; posticæ albæ, apud margines pallide fuscescentes.

Pale testaceous. Wings with black marginal points. Fore wings with the median vein and the inferior veins white, mostly bordered with brown: an interrupted brown posterior stripe, which is darkest towards the base, and some exterior brown streaks. Hind wings white, pale brownish towards the borders. Length of the body 5 lines; of the wings 12 lines.

a, b. South Africa. Presented by Dr. A. Smith.

58. LEUCANIA INCERTA.

Fœm. Pallide testacea; alæ anticæ nigro subconsersæ; posticæ albæ.

Female. Pale testaceous. Fore wings slightly speckled with black, but without any other distinct marks. Hind wings white. Length of the body $5\frac{1}{2}$ lines; of the wings 12 lines.

a. South Africa. Presented by Dr. A. Smith.

Subgroup ?

59. LEUCANIA FUSCILINEA.

Alæ anticæ cinereo rufulæ, venis dilutioribus vix distinctis, puncto discali albo intus nigro notato, lineis duabus fuscis longitrorum positis, priori ad basim, 2a prope supraque in medio collocata, serie transversa incurvata punctorum nigrorum parvorum; posticæ cinereæ.

Leucania fuscilinea, DeGraslin, Ann. Soc. Ent. Fr. 2me Sér. x. 411, 2, pl. 8, No. 1, f. 2.

West Coast of Africa.

Isle of France.

Group 1.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

60. LEUCANIA INSULICOLA.

Villosa, robusta; antennæ longæ, ciliato-crenulatæ; alæ anticæ carneo-cinereæ, apud costam rectæ, apice angulatæ, venis guttaque discali cuneiformi albis, umbra nigricante, apice obscuræ striga obliqua pallida.

Leucania insulicola, Guén. Noct. i. 82, 116.

Isle of France.

Hindustan.

Group 1.

Like the first European group.

Subgroup 1.

61. LEUCANIA YU.

Alæ anticæ ochraceo-cinereæ, nigro ex parte conspersæ, areola discali apice rufescente nigroque bipunctata, costa margineque exteriori rectis; posticæ nigricante cinereæ, basi pallidiores subhyalinæ, ciliis flavescence-albis.

Leucania Yu, Lefebvre, MSS. Guén. Noct. i. 78, 105.

Manilla.

Group 2.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

62. LEUCANIA EXSANGUIS.

Var? *Pallidissime testacea; abdomen albidum; alæ anticæ nigro subconsersæ, vittis posterioribus albis cervino submarginatis, striga obliqua apicali albida, areolis exterioribus nigro lineatis; posticæ albæ, apud margines subcinereæ.*

Leucania exsanguis, Guén. Noct. i. 83, 118.

Silhet. Java.

Var. ? Very pale testaceous. Abdomen whitish. Fore wings slightly speckled with black; the median vein and its branches white, slightly bordered with fawn-colour; an oblique whitish apical streak; exterior areolets with some black lines. Hind wings white, very slightly cinereous towards the borders. Length of the body 6 lines; of the wings 14 lines.

a. North India. From Mr. Stevens' collection.

63. LEUCANIA COLLECTA.

*Pallide testacea aut pallidissime cervina; thorax fasciis subcine-
reis; abdomen pallidissime testaceum; alæ anticæ nigro sub-
conspersæ, gutta discali alba, vitta discali fuscescente, postica
pallidior, guttis exterioribus nigris, margine exteriori fusco
punctis nigris; posticæ albæ, venis obscurioribus, guttis mar-
ginalibus fuscis.*

Pale testaceous or very pale fawn-colour. Thorax with some grayish bands. Abdomen very pale testaceous. Fore wings slightly speckled with black, with the usual white discal dot, which is included in a brownish stripe; the latter is imperfectly joined to a brown space along the exterior border, and having a paler stripe behind it; the usual exterior black dots and marginal points. Hind wings white, with darker veins, and with brown marginal dots. Length of the body 6 lines; of the wings 14 lines.

a. Punjaub. Presented by General Hearsay.

64. LEUCANIA CONFUSA.

*Pallidissime cervina; abdomen albido-testaceum; alæ anticæ sat
latæ, guttis tribus discalibus nigricantibus, apice subrotun-
datæ, costa subrecta, margine exteriori recto vix obliquo;
posticæ albæ.*

Very pale fawn-colour. Abdomen whitish testaceous. Fore wings rather broad, with three blackish dots in the disk; costa nearly straight, tips slightly rounded; exterior border straight, very slightly oblique. Hind wings white. Length of the body 5 lines; of the wings 12 lines.

a, b. Ceylon. Presented by R. Templeton, Esq.

65. LEUCANIA INFERENS.

*Pallide cervina; abdomen albido-testaceum; alæ anticæ guttis tri-
bus discalibus, vitta intermedia fuscescente, lineaque apud
marginem exteriori vix interrupta nigricante; posticæ albæ.*

Pale bright fawn-colour. Abdomen whitish testaceous, much paler than the thorax. Fore wings with three black discal dots and with an intermediate brownish stripe, which accompanies the median vein and its branches; a hardly interrupted blackish line along the exterior border. Hind wings white. Length of the body $4\frac{1}{2}$ lines; of the wings 10 lines.

a. Ceylon. Presented by R. Templeton, Esq.

66. LEUCANIA EXTERIOR.

Pallide testacea; thorax fasciis fuscescentibus; abdomen albidotestaceum; alæ anticæ lineis anticis pallidis, gutta discali albida, vitta discali plagaque marginali fuscis, venis posterioribus albis, guttis exterioribus nigris; posticæ albæ, venis margineque fuscescentibus.

Pale testaceous. Thorax with brownish bands. Abdomen whitish testaceous. Fore wings with pale lines along the areolets in front of the usual whitish discal dot, which is included in a brown discal stripe, and the latter joins a dilated brown space along the exterior border; median vein and inferior veins white; the usual exterior black dots. Hind wings white; veins and space between them along the exterior border brownish. Length of the body 4 lines; of the wings 12 lines.

a. Punjaub. Presented by General Hearsay.

67. LEUCANIA PROSCRIPTA.

Pallide testacea; abdomen albidum; alæ anticæ apud marginem exteriorem cervinæ, guttis exterioribus indistinctis, vitta discali fuscescente, linea marginali fusca, ciliis albidotestaceis; posticæ albæ.

Pale testaceous. Abdomen whitish. Fore wings fawn-coloured towards the exterior border, with the exterior dots indistinct; a pale brownish discal stripe, and a brown line along the exterior border, which has whitish testaceous ciliæ. Hind wings white. Length of the body 5 lines; of the wings 10 lines.

a. East Indies. From Archdeacon Clerk's collection.

Subgroup 2.

Like the fourth European subgroup.

68. LEUCANIA THORACICA.

Mas. *Pallide cervina; caput et thorax anticus obscuriora; alæ anticæ vittis duabus discalibus subobscurioribus, striga exteriore obscuriore antice obliqua et angulata, gutta discali albida, guttis exterioribus subobsoletis, punctis marginalibus vix distinctis; posticæ albæ, marginibus subtestaceis.*

Male. Pale fawn-colour. Head and fore part of the thorax darker. Fore wings with two slightly darker indistinct discal

stripes, and with a darker streak, which extends along the exterior border, and is oblique and angular in front; a whitish discal dot; exterior dots almost obsolete; marginal points indistinct. Hind wings white, slightly testaceous along the borders. Length of the body 6 lines; of the wings 14 lines.

Dukhun. In the East India Company's collection.

69. LEUCANIA DESIGNATA.

Testacea; abdomen subalbidum; alæ anticæ vitta discali fusca guttam albam includente apud marginem dilatata, guttis exterioribus indistinctis, punctis marginalibus distinctis; posticæ albæ, margine exteriori fusciscente.

Testaceous. Abdomen almost whitish. Fore wings with a brown discal stripe, which includes a white discal dot, and is dilated towards the exterior border, and extends along it; exterior dots indistinct; black marginal points distinct. Hind wings white; exterior border mostly pale brown. Length of the body $4\frac{1}{2}$ lines; of the wings 11 lines.

Canara. In the East India Company's collection.

70. LEUCANIA DENOTATA.

Fœm. Testacea; thorax fusco fasciatus; alæ anticæ strigis areolaribus indistinctis obscurioribus, vitta discali strigaeque exteriori fusciscentibus, gutta discali albida, guttis exterioribus indistinctis, punctis marginalibus fuscis bene determinatis, costa fusco subconspersa; posticæ albæ.

Female. Testaceous. Thorax with several brown bands. Fore wings with indistinct darker streaks on the areolets, and with a pale brownish discal stripe, which joins a streak of the same hue along the exterior border; a whitish discal dot; exterior dots indistinct; brown marginal points distinct; costa minutely speckled with brown. Hind wings white. Length of the body 6 lines; of the wings 13 lines.

North India. In the East India Company's collection.

Subgroup 2.

Corpus vix robustum. Alæ anticæ vittis argenteis.

Body hardly stout. Fore wings with silvery stripes, obtuse at the tips, hardly oblique along the exterior border.

71. LEUCANIA BIVITTATA.

Ochracea ; abdomen fasciis subargenteis ; alæ anticæ vittis duabus strigisque exterioribus argenteis ; posticæ argenteæ.

Orange-colour. Abdomen with somewhat silvery bands. Fore wings with two bright silvery white stripes ; the fore one obsolete towards the base of the wing ; a row of silvery streaks along the exterior border ; underside silvery white. Hind wings bright silvery white. Length of the body $4\frac{1}{2}$ lines ; of the wings 11 lines.

a. East Indies. From Archdeacon Clerk's collection.

Subgroup 3.

Alæ anticæ auratæ.

Fore wings gilded.

72. LEUCANIA AUREOLA.

Cervina ; abdomen pallide luteum ; alæ anticæ angustæ, auratæ, apice rotundatæ, apud costam cervinæ, vitta discali interrupta fusca, guttis exterioribus indistinctis, guttis marginalibus nigris optime determinatis ; posticæ albæ.

Fawn-colour. Abdomen pale luteous. Fore wings gilded, narrow, rounded at the tips, rather oblique along the exterior border, fawn-colour along the costa, with a brown discal stripe, which is interrupted towards the border ; exterior dots indistinct ; black marginal dots very distinct. Hind wings white. Length of the body 5 lines ; of the wings 12 lines.

Canara. In the East India Company's collection.

Subgroup 4.

Alæ anticæ latiusculæ, apud costam rectæ, apice rectangulatæ, margine exteriore vix obliquo.

Group 1.

Fore wings rather broad, straight in front, rectangular at the tips, hardly oblique along the exterior border.

73. LEUCANIA SEJUNCTA.

Mas. *Cinereo-cervina*; abdomen *fuscum*, *subglaucescens*, apice *fasciculatum*; alæ anticæ *linea transversa exterior e maculis septem fuscis*, *guttis marginalibus fuscis*; *posticæ fuscae*.
 Fœm.—*Pallidissime cervina*; alæ anticæ *vix conspersæ*, *fascia*, *exterior e maculis tribus fuscis*, *guttis marginalibus nigris*, *disco subtus fuscescente*.

Male.—Cinereous fawn-colour. Abdomen brown, except at the base, slightly glaucous, tufted at the tip. Fore wings with seven brown spots in a transverse line near the exterior border, where there is a row of brown dots. Hind wings brown. *Female*.—Very pale fawn-colour. Fore wings very indistinctly and minutely speckled, with three brown spots in a transverse line near the exterior border, along which there is a row of black dots; disk beneath brownish. Hind wings not paler than the fore wings. Length of the body 5 lines; of the wings 12—13 lines.

a, b. Hindostan. From Archdeacon Clerk's collection.

Isle Tristram da Cunha.

Group 1.

Like the first European group.

74. LEUCANIA EXOUL.

Pallide cervina; alæ anticæ *subconsersæ*, *striga pallidior e maculata*, *strigae obliqua fuscescente exterior e*; *posticæ pallidiores*.

Male. An injured specimen. {Pale fawn-colour. Fore wings minutely speckled, with a paler streak, containing some darker marks in the disk, and with an oblique brownish streak by the exterior border. Hind wings paler than the fore wings. Length of the body 5 lines; of the wings 12 lines.

a. Isle Tristan da Cunha.

Australia.

Group 1.

Like the second European group.

Subgroup 1.

Like the first European subgroup.

75. LEUCANIA UDA.

L. punctosæ simillima; alæ anticæ marginibus late albidis, venis albis, guttis exterioribus bene determinatis; posticæ obscuræ.

Leucania uda, Guén. Noct. i. 80, 111.

Australia.

Subgroup 2.

Alæ anticæ albo vittatæ.

Fore wings striped with white.

76. LEUCANIA CRAMBOIDES.

Fusco-cervina; abdomen pallide cervinum; alæ anticæ linea discali alba intus tenuiore; posticæ paullo pallidiores, ciliis albis.

Leucania Cramboides, Guén. Noct. i. 84, 122.

a, b. Australia. Presented by Major-General Hardwicke.

Subgroup 3.

Alæ anticæ non vittatæ.

Fore wings not striped.

77. LEUCANIA CILIATA.

Pallidissime cervina; thorax nigro conspersus, fasciis anticis nigricantibus; abdomen testaceum, basi albidum; alæ anticæ fasciis guttularibus tribus punctisque marginalibus nigris, ciliis rufescentibus; posticæ pallide cinereæ, antice albæ, ciliis albis basi pallide rufis.

Very pale fawn-colour. Thorax and fore wings speckled with black, the former with blackish bands in front. Abdomen testaceous, whitish towards the base. Fore wings with a white discal dot, with one interior and with two exterior bands of blackish dots, and with black marginal points; exterior border hardly oblique; ciliæ reddish. Hind wings pale cinereous, white in front; ciliæ

white, pale red towards the base. Length of the body 4 lines; of the wings 10 lines.

a. Sydney. From Mr. Lambert's collection.

78. LEUCANIA INVARIA.

Pallidissime testacea; caput et thorax pallide cervina; alæ posticæ margine latissimo pallide cinereo.

Very pale testaceous. Head and thorax pale fawn-colour. Hind wings with a very broad pale cinereous border. Length of the body 3—4 lines; of the wings 8—10 lines.

a—c. Sydney. From Mr. Lambert's collection.

Subgroup 4.

Alæ anticæ breviuscula, sat angustæ, apice subobtusæ, margine exteriore mediocriter obliquo.

Fore wings somewhat short and narrow, rather obtuse at the tips, moderately oblique along the exterior border.

79. LEUCANIA TRUNCATA.

Pallide cervina; thorax paullo obscurior; abdomen testaceum; alæ anticæ guttis exterioribus nigris vix distinctis, punctis marginalibus bene determinatis; posticæ canæ aut cinereæ.

Pale fawn-colour. Thorax a little darker than the fore wings. Abdomen testaceous. Fore wings, with the exterior transverse line of black dots, very minute and indistinct; marginal black points more distinct. Hind wings hoary or cinereous. Length of the body 4—5 lines; of the wings 9—11 lines.

a—d. Adelaide. Presented by the Entomological Club.

New Zealand.

Group 1.

Like the first European group.

80. LEUCANIA PROPRIA.

Pallide cervina; thorax obscurior, fascia guttulari nigra; alæ anticæ lineis nonnullis nigris discalibus vitta atra basali, vitta anteriore nigra fusco nebuloza guttisque exterioribus et marginalibus; posticæ cinereæ, ciliis pallidioribus.

Pale fawn-colour. Thorax a little darker than the body elsewhere, with a very slight band of black dots. Fore wings with some slight black discal lines, with a deep black basal stripe, a little in front of which there is a black discal stripe shaded with brown; the exterior and marginal black dots as usual. Hind wings slightly cinereous, with paler ciliæ. Length of the body 5 lines; of the wings 12 lines.

a. New Zealand. From Mr. Earl's collection.

Group 2.

Like the second European group.

Subgroup 1.

Alæ anticæ invariæ, sat angustæ, subobtusæ, margine exteriori mediocriter obliquo.

Fore wings unvaried, rather narrow, slightly obtuse at the tips, moderately oblique along the exterior border.

81. LEUCANIA UNICA.

Pallide cervina; abdomen pallidissimum; alæ anticæ innotatæ, posticæ testaceo-albidæ.

Pale fawn-colour. Abdomen much paler than the thorax. Fore wings without any markings. Hind wings whitish, with a slight testaceous tinge. Much resembles *L. truncata*. Length of the body $4\frac{1}{2}$ lines; of the wings 12 lines.

a. New Zealand. From Mr. Earl's collection.

Sandwich Islands.

Group 1.

Like the first European group.

82. LEUCANIA DISLOCATA.

Pallidissime cervina; caput et thorax anticus obscuriora; thorax fascia antica albida; abdomen albido-testaceum; alæ anticæ nigro subconspersæ, linea alba, striga posteriore nigricante, striga diffusa discali nigricante guttisque marginalibus nigris; posticæ cinereæ, ciliis albis.

Very pale fawn-colour. Head and fore part of the thorax

darker than the body elsewhere. Thorax with a whitish band in front. Abdomen whitish testaceous. Fore wings very slightly speckled with black, with a white line as usual on the median vein, behind which there is a blackish streak; a diffuse blackish streak on the discal areolet; a row of black marginal dots. Hind wings cinereous, with white ciliæ. Length of the body 7 lines; of the wings 14 linss.

a. Sandwich Islands. Presented by the Lords of the Admiralty.

Country unknown.

Group 1.

Like the first European group.

83. LEUCANIA AVERSA.

Pallide cervina; thorax fasciis anticis fuscis; alæ anticæ linea discali alba fusco marginata strigisque exterioribus fuscis albo marginatis; posticæ pallidæ, marginibus latis fusciscentibus.

Pale fawn-colour. Thorax with brown bands in front. Fore wings with a white brown-bordered discal line, and with brown white-bordered exterior streaks. Hind wings pale, with broad brownish borders. Described from an injured specimen. Length of the body 6 lines; of the wings 14 lines.

a. ———?

84. LEUCANIA TENEBRIFERA.

Mas. *Pallide cervina; thorax fasciis duabus anticis nigris; alæ anticæ testaceæ fusco subconspersæ, vitta lata discali diffusa fusca, striga interrupta nigricante exteriori guttisque marginalibus nigris; posticæ canæ, marginibus cinereis nigro guttatis.*

Male. Pale fawn-colour. Thorax with two black bands in front. Fore wings testaceous, slightly speckled with brown, with a broad brown somewhat diffuse stripe in the disk, and with a much interrupted blackish streak in front of the exterior part of this stripe; a row of black marginal dots. Hind wings hoary, slightly cinereous about the borders, where there is a row of indistinct black dots. Length of the body 6 lines; of the wings 13 lines.

a. ———?

Group 2.

Like the second European group.

85. LEUCANIA EXTERNA.

Pallide testacea; alæ anticæ fusco subconspectæ, vitta nitente obscure fusca exterior strigisque pallidioribus fuscis; posticæ albæ opalinæ.

Pale testaceous. Fore wings very thinly speckled with brown, adorned with a dark brown shining stripe, which extends along the exterior half of the wing near the costa, and is accompanied by some paler brown shining streaks. Hind wings white, very pearly. Length of the body $5\frac{1}{2}$ lines; of the wings 13 lines.

a. ———? From Mr. Children's collection.

86. LEUCANIA MODERATA.

Mas. *Pallide testacea; thorax cervinus, fascia antica pallide testacea; alæ anticæ linea discali albida, guttis tribus anterioribus, lineis tribus posterioribus strigisque brevi obliqua subapicali fuscis; posticæ albidæ, marginibus pallide fuscescentibus.*

Male. Pale testaceous. Thorax fawn-colour, with a broad pale testaceous band in front. Fore wings with a whitish discal line, which has three brown dots in front, and is accompanied along its hinder side by a brown line, and close behind the latter there are two other incomplete parallel brown lines; a short oblique subapical brown streak. Hind wings whitish, with pale brownish borders. Length of the body 5 lines; of the wings 12 lines.

a. ———?

87. LEUCANIA INTERROGANS.

Testacea; thorax et alæ anticæ fusco conspersa; alæ anticæ vitta valde diffusa discali fusca, lituris tribus anterioribus obscurioribus testaceo marginatis, guttis marginalibus fuscis; posticæ subcinereæ. Var.—Alæ anticæ pallidiores, vix notatæ.

Testaceous. Thorax and fore wings speckled with brown. Fore wings with a very diffuse brown discal stripe, in front of which there are three darker pale testaceous-bordered marks, the first a dot by the base, the second a discal spot, the third exterior and

somewhat like a ?; a row of brown marginal dots. Hind wings somewhat cinereous. *Var.*—Fore wings paler, and with the marks very indistinct. Length of the body 5 lines; of the wings 12 lines.

a, b. ———? From Mr. Milne's collection.

Group 3.

Like the third European group.

88. LEUCANIA MORIBUNDA.

L. Phragmitidis simillima, minor; alæ anticæ unicolores, minus acutæ, non falcatae; posticæ subnigricantes.

Leucania moribunda, Guén. Noct. i. 95, 150.

———?

Genus 5. SESAMIA.

Corpus robustum. Proboscis brevis. Palpi porrecti, caput superantes; articulus 3us longi-conicus, 2i triente vix brevior. Antennæ graciles, filiformes. Abdomen alas posticas triente superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam subrectæ, apice angulatæ, margine exteriori subobliquo. *Mas.*—Antennæ subciliatæ. *Fæm.*—Antennæ simplices.

Nonagria, p., Duponch; Boisd.; Guén. olim.

Leucania, p., Herr.-Schæff.

Sesamia, Guén. Noct. i. 95.

Body stout. Proboscis short. Palpi porrect, extending somewhat beyond the head; third joint elongate-conical, nearly one-third of the length of the second. Antennæ slender, filiform. Abdomen extending for one-third of its length beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings almost straight in front, nearly rectangular at the tips, very slightly oblique along the exterior border. *Male.*—Antennæ minutely ciliated. *Female.*—Antennæ simple.

1. SESAMIA NONAGRIOIDES.

Testacea; alæ anticæ striga discali margineque exteriori obscurioribus; gutta discali punctisque exterioribus nigris; posticæ albæ.

Cossus nonagrioides, Lefebv. *Ann. Soc. Linn.* vi. 98, pl. 5.

Nonagria hesperica, Ramb. *Faun. Andal. Guén. Ann. Soc. Ent. Fr.* vi. 237. *Boisd. Ind. Méth.* 134, 1084. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 470, pl. 41, f. 2.

Leucania Hesperica, Herr.-Schæff. *Schmett. Eur.* ii. 237, 168; ii. *Noct.* pl. 67, f. 344, 345.

Sesamia nonagrioides, Guén. *Noct.* i. 96, 151.

South France. Andalusia. Sicily.

Genus 6. MELIANA.

Corpus gracile. Proboscis brevis. Palpi graciles, ascendentes; articulus 3us conicus, minimus. Antennæ simplices, graciles, corporis dimidio longiores. Abdomen alas posticas superans. Pedes graciles, longiusculi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ longiusculæ, sat angustæ; anticæ lanceolatae, acuminatae, apud costam subconvexæ, margine exteriori perobliquo.

Meliana, Curt. *Brit. Ent.* 201. *Guén. Noct.* i. 96.

Senta, p., Steph. *Ill. Brit. Ent. Haust.* iv.

Chilodes, Herr.-Schæff.

Symira, Treits.

Body slender. Proboscis short. Palpi slender, ascending; third joint conical, very minute. Antennæ simple, slender, more than half the length of the body. Abdomen extending somewhat beyond the hind wings. Legs slender, rather long; hind tibiæ with four moderately long spurs. Wings rather long and narrow. Fore wings lanceolate, slightly convex in front, acuminate at the tips, very oblique along the exterior border; fourth inferior vein remote from the others, which are approximate.

1. MELIANA FLAMMEA.

Alæ anticæ acutæ, rufescente fuscæ, vitta obscure fusca lineaque transversa exteriori e punctis nigris.

Melia flammea, Curt. *Brit. Ent.* v. pl. 201.

Meliana sericea, Guén. *Noct.* 97, 152.

Senta flammea, Steph. *Ill. Brit. Ent. Haust.* iv. 297. *Cat. Brit. Lep.* 120.

Nonagria arundinicola, Doubleday, *List. Brit. Lep.* 7.

a. England. Presented by — Whitwell, Esq.

b, c. England. From Mr. Stephens' collection.

2. MELIANA DUBIOSA.

Testacea; *alæ anticæ lanceolatæ, venis pallidioribus obscurius cinctis, vitta costali lata nivea apicem versus diluta.*

Symira dubiosa, Treit. Schmett. *Eur. Suppl.* 86.

Chilodes dubiosa, Herr.-Schæff. *Eur. Schmett.* ii. 226, 138; ii. *Noct.* pl. 69, 356.

Meliana dubiosa, Guén. *Noct.* i. 153.

Meliana flammea?

Hungary.

Genus 7. SENTA.

Corpus gracile. Proboscis brevis. Palpi porrecti; articulus 3us lanceolatus, 2i quadrante non brevior. Antennæ graciles, simplices, corporis dimidio multo longiores. Abdomen alas posticas triente superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ; anticæ apud costam subconvexæ, margine exteriori subangulato.

Senta, p., Steph. *Ill. Brit. Ent. Haust.* iii. 279.

Senta, Guén. *Noct.* i. 98.

Nonagria, p., Ochs.; Treit.; Boisd.; Duponch.

Chilodes, p., Herr.-Schæff.

Body slender. Proboscis short. Palpi porrect; third joint lanceolate, full one-fourth of the length of the second. Antennæ slender, simple, very much more than half the length of the body. Abdomen extending for about one-third of its length beyond the hind wings. Legs rather long and slender; hind tibiæ with four long spurs. Wings rather narrow. Fore wings slightly convex in front, rectangular at the tips; exterior border slightly angular in the middle, the hind side of the angle very oblique; veins much like those of *Meliana*.

1. SENTA ULVÆ.

Alæ anticæ obtusæ, sericeæ, rufescente ochraceæ, fusco subconsersæ, linea transversa exteriori e punctis fuscis.

Noctua Ulvæ, *Hübner. Samml. Eur. Schmett.* f. 635, 636; 666—668.

Nonagria Ulvæ, *Boisd. Ind. Méth.* 134, 1079.

Chilodes Ulvæ, *Herr.-Schæff. Eur. Schmett.* ii. 226, 137; ii. *Noct.* pl. 77, f. 397.

Melia sericea, *Curt. Brit. Ent.* v. 201.

Meliana sericea, Senta sericea, *Steph. Ill. Brit. Ent. Haust.* iv. 297; *Cat. Brit. Lep.* 120. *Guén. Noct.* i. 98, 154.

Var. *Alæ anticæ cinereæ, annulis duobus discalibus nigris.*

Tortrix bipunctana, *Haw. Trans. Ent. Soc.* i. 357.

Ilythia anella, *Steph. Ill. Brit. Ent. Haust.* iv. 297, 2.

a—h. England. From Mr. Stephens' collection.

i. England.

Genus 8. CŒNOBIA.

Corpus gracile. Palpi graciles, oblique ascendentes; articulus 3us lanceolatus, 2i quadrante non longior. Antennæ graciles. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticis calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice vix angulatæ, margine exteriori subobliquo. *Mas.*—Antennæ subciliatæ. *Fœm.*—Antennæ simplices.

Nonagria, p., *Treit.*; *Geyer*; *Duponch.*; *Boisd.*; *Herr.-Schæff.*

Phytometra, p.? *Haw.*

Acosmetia, p., *Steph. Ill. Brit. Haust.*

Cœnobia, *Steph. Cat. Brit. Lep.* 121.

Body slender. Palpi slender, obliquely ascending; third joint lanceolate, about one-fourth of the length of the second. Antennæ slender. Abdomen extending for about one-third of its length beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, hardly angular at the tips, slightly oblique along the exterior border. *Male.*—Antennæ minutely ciliated. *Female.*—Antennæ simple.

1. CÆNOBIA DESPECTA.

Testacea aut pallide cervina; alæ anticæ lineis duabus transversis et punctis nigricantibus; posticæ albidæ, testaceo marginatæ.

Noctua despecta, Hübn. Eur. Schmett. Noct. pl. 160, f. 751, 752.

Nonagria despecta, Treit. Schmett. Eur. ii. 311. Gey. Samml. Eur. Schmett. 751, 752. Dup. Hist. Nat. Lép. Fr. Suppl. iii. 355, pl. 32. Boisd. Ind. Méth. 134, 1078. Guén. Ann. Soc. Ent. Fr. vi. 237; Noct. i. 102, 155. Herr.-Schæff. Eur. Schmett. ii. 245, 188; ii. Nact. pl. 71, f. 365.

Phytometra rufa? Haw. Lep. Brit. 16.

Acosmetia lineola, Steph. Il. Brit. Haust. iii. 123, 4.

Acosmetia rufa, Steph. Ill. Brit. Haust. iii. 123, 3.

Cænobia rufa, Steph. Cat. Brit. Lep. 121.

a—k. England. From Mr. Stephens' collection.

l, m. England.

Genus 9. CARVANCA.

Corpus gracile. Proboscis brevis. Palpi graciles, ascendentes; articulus 3us minimus. Antennæ simplices, sat validæ, corporis dimidio longiores. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ late ciliatæ; anticæ angustæ, apud costam subconvexæ, apice rotundatæ, margine exteriori vix obliquo.

Body slender. Proboscis short. Palpi slender, ascending; third joint very minute. Antennæ simple, rather stout, more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings with broad ciliæ. Fore wings narrow, slightly convex in front, rounded at the tips, hardly oblique along the exterior border; first, second and third inferior veins contiguous; fourth rather remote. Resembles some of the *Pyralites*.

1. CARVANCA TRISECTA.

Testacea; abdomen albidum; alæ anticæ substrigatæ, nigro subconspersæ, vitta discali tripartita guttisque marginalibus nigris; posticæ albido cinereæ, ciliis albis.

Testaceous. Abdomen whitish. Fore wings minutely speckled with black, with very slight and indistinct darker streaks, with a slender black discal stripe, which is twice interrupted, and with

black marginal dots. Hind wings whitish cinereous, with white ciliæ. Length of the body 4 lines; of the wings 10 lines.

a. Nova Scotia. From Lieut. Redman's collection.

Genus 10. NONAGRIA.

Corpus sæpissime robustum. Proboscis brevis. Palpi ultra frontem ascendentes. Antennæ crassiusculæ. Thorax lævis, rotundatus. Abdomen alas posticas superans. Alæ elongatæ, maculis ordinariis sæpius conspicuis. Larva elongata, antice posticeque scutellata, paludicola, capite parvo, in caulibus Graminearum vel Cyperacearum occulte degens. Metamorphosis in caulibus. Pupa capite tuberculo obliquo acuto nasiformi prædita. *Mas.*—Antennæ crenulatæ. *Fæm.*—Antennæ simplices.

Nonagria, *Ochs. Syst. Gloss.; Treit.; Steph.; Guénée, Ann. Soc. Ent. Fr.* vi. 328; *Noct.* 2, 99.

Leucania, p., et Nonagria, *Boisd.; Duponch.; Herr.-Schæff.*

Body generally robust. Proboscis short. Palpi ascending. Antennæ rather stout. Thorax smooth. Abdomen extending beyond the hind wings. Fore wings with the ordinary marks generally visible. *Male.*—Antennæ crenulate. *Female.*—Antennæ simple.

Europe.

Group 1.

Statura sat parva. Corpus vix robustum. Alæ anticæ sæpissime pallidæ, vix notatæ.

Size rather small. Body hardly stout. Fore wings generally pale, with hardly any markings.

1. NONAGRIA FULVA.

Pallide cervina; abdomen sordide albidum; alæ anticæ invariæ, posticæ albidæ, fusco subconspersæ.

Var. Canescens; alæ fusco subconspersæ, anticæ apud margines posticæque fere totæ cinerascens.

Noctua fulva, *Hübner. Samml. Eur. Schmett. Noct.* f. 496. *Duponch. Hist. Nat. Léop. Fr.* 83, pl. 106, f. 4.

Noctua fluxa?? *Hübner. Samml. Eur. Schmett. Noct.* f. 413.

Noctua pygmina? *Haw. Lep. Brit.* 46.

- Leucania fluxa*, Steph. Ill. Brit. Ent. Haust. iii. 77.
Leucania pallida, Steph. Ill. Brit. Ent. Haust. iii. 78.
Leucania neurica, Steph. Ill. Brit. Ent. Haust. iii. 79.
Nonagria fulva, Steph. Cat. Brit. Lep. 121.
Nonagria fluxa, Treit. Schmett. Eur. ii. 313; Suppl. 94. Boisd.
 Ind. Méth. 134, 1077. Dup. Suppl. iii. 351, pl. 32. Guén.
 Ann. Soc. Ent. Fr. vi. 237; Noct. i. 102, 156.
Leucania fulva, Herr.-Schæff. Eur. Schmett. ii. 227, 139; ii. Noct.
 pl. 66, f. 332, 333 (extrema).
a—c. England. From Mr. Carter's collection.
d—aa. England. From Mr. Stephens' collection.
bb—dd. England.

2. NONAGRIA EXTREMA.

- Mas. *Cervina*; abdomen pallidum; alæ anticæ areola media
 paullo obscuriore macula centrali pallida; posticæ albidæ.
 Fœm.—Albida; alæ anticæ guttis exterioribus nigris.
Noctua extrema, Hübn. Samml. Eur. Schmett. Noct. f. 412.
Nonagria extrema, Treit. Schmett. Eur. ii. 315. Boisd. Ind. Méth.
 134, 1075. Guén. Noct. i. 103, 157.
Leucania extrema, Meig. Syst. Besch. Eur. Schmett. iii. 170, 11,
 pl. 108, f. 14. Herr.-Schæff. Eur. Schmett. ii. 228, 140; ii.
 Noct. pl. 66, f. 336, 337.
 Germany.

3. NONAGRIA CONCOLOR.

- Testaceo-albida*; alæ anticæ guttis exterioribus nigricantibus sub-
 obsoletis; posticæ subcinerascens.
Leucania extrema? Herr.-Schæff. Schmett. Eur. 228, 140.
Nonagria concolor, Guén. Noct. i. 103, 58.
a. England. Presented by T. Shuckard, Esq.
b—g. England. From Mr. Stephens' collection.

4. NONAGRIA HELLMANNI.

- Lithargyrea*; alæ anticæ area media paullo obscuriore, stigmate
 medio pallidiore.
Nonagria Hellmanni, Eversm. Bull. Soc. Imp. Nat. Mosc. 1843;
 Faun. Volg-Ural. 270. Guén. Noct. i. 134, 160.

Leucania Hellmannii, *Herr.-Schæff. Eur. Schmiett.* ii. 229, 142,
ii. *Noct.* pl. 66, f. 338, 339.

Ural Region.

The following specimens may perhaps belong to *N. extrema*.

- a, b.* England. Presented by — Whitwell, Esq.
c, d. England. Presented by E. Doubleday, Esq.
e. England. From Mr. Carter's collection.
f, g. England. From Mr. Stephens' collection.

5. NONAGRIA JNCI.

N. extremæ affinis at minor; alæ anticæ pallide stramineæ, vena media infuscata, macula reniformi obsoleta albida; posticæ nigricantes.

Nonagria Junci, *Boisd. Ind. Méth.* 134, 1076. *Guén. Noct.* i. 105, 161.

West Germany.

6. NONAGRIA ELYMI.

Testacea; alæ anticæ venis loco strigæ posterioris nigro irroratis; posticæ albidæ.

Leucania Elymi, *Treit. Schmiett. Eur.* ii. 294. *Boisd. Ind. Méth.* 133, 1072. *Dup. Hist. Nat. Lép. Fr. Suppl.* 334, pl. 31, f. 1. *Herr.-Schæff. Eur. Schmiett.* ii. 229, 141; ii. *Noct.* pl. 67, f. 346.

Nonagria Elymi, *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 105, 162.

Prussia.

Group 2.

Corpus sat validum. Palpi porrecti, caput superantes; articulus 3us lanceolatus, 2i dimidio æqualis. Abdomen alas posticas triente superans. Pedes graciles; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter latæ; anticæ apud costam vix convexæ, apice angulatæ, margine exteriori vix obliquo. *Mas.*—Antennæ ciliatæ. *Fæm.*—Antennæ simplices.

Body moderately stout. Palpi porrect, extending some distance beyond the head; third joint lanceolate, about half the length of the second. Abdomen extending for about one-third of its length beyond the hind wings. Legs slender; hind tibiæ with four

short spurs. Wings moderately broad. Fore wings hardly convex in front, angular at the tips, hardly oblique along the exterior border. *Male*.—Antennæ ciliated. *Female*.—Antennæ simple.

7. NONAGRIA NEURICA.

Pallide cervina; abdomen sordide albidum; alæ anticæ atomis vitta diffusa discali guttisque marginalibus nigris; posticæ cinereæ, basi sordide albidæ.

Noctua neurica, *Hübner. Samml. Eur. Schmett. Noct.* f. 381.

Leucania neurica, *Meig. Syst. Besch. Eur. Schmett.* iii. 171, 13. pl. 109, f. 1.

Nonagria neurica, *Treit. Schmett. Eur.* ii. 319. *Dup. Hist. Nat. Léop. Fr.* iv. 85, pl. 106. *Boisd. Ind. Méth.* 134, 1080. *Herr.-Schæff. Eur. Schmett.* ii. 244, 186; ii. *Noct.* pl. 68, f. 347, 348. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 106, 165. *Steph. Cat. Brit. Lep.* 122.

Germany.

a—d. England. From Mr. Stephens' collection.

e—g. England. From Mr. Foxcroft's collection.

h. England.

i. Europe. From M. Becker's collection.

8. NONAGRIA DISSOLUTA.

Alæ anticæ nigro-fuscæ, macula reniformi albida intus fusca; posticæ pallidæ.

Nonagria neurica, var. dissoluta, *Treit. Schmett. Eur.* ii. 319.

Noctua neurica, *Hübner. Samml. Eur. Schmett. Noct.* f. 559, 561.

Nonagria Hessii, *Boisd. Ind. Méth.* 134, 1081. *Guén. Ann. Soc. Ent. Fr.* vi. 237.

Nonagria dissoluta, *Guén. Noct.* i. 106, 166.

Germany.

Group 3.

Corpus validum. Palpi oblique ascendentes, caput superantes; articulus 3us 2i triente non brevior. Abdomen alas posticas dimidio superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ breviusculæ, mediocriter latæ; anticæ apud costam subrectæ, apice subangulatæ, margine exteriori vix obliquo. *Mas*.—Antennæ vix ciliatæ. *Fæm*.—Antennæ simplices.

Body stout. Palpi obliquely ascending, extending beyond the head; third joint somewhat elongated, full one-third of the length

of the second. Abdomen extending for almost half its length beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather short, moderately broad. — Fore wings almost straight in front, slightly angular at the tips, hardly oblique along the exterior border. *Male*.—Antennæ very minutely ciliated. *Female*.—Antennæ simple.

9. NONAGRIA PALUDICOLA.

Cervina; palpi nigri; abdomen cinerascens; alæ anticæ venis nigricantibus albo variis, gutta discali alba punctoque interiore nigro, posticæ cinerascens, ciliis pallide cervinis.

Noctua paludicola, Hübn. Samml. Eur. Schmett. Noct. f. 624, 637.

Noctua guttans, Hübn. Samml. Eur. Schmett. Noct. pl. 137, f. 628, 629.

Nonagria paludicola, Treit. Schmett. Eur. ii. 321. Guén. Ann. Soc. Ent. Fr. ii. 447, pl. 16; Noct. i. 106, 167. Boisd. Icon. des Chen. ix.; Ind. Méth. 135, 1085. Dup. Hist. Nat. Lép. Fr. Suppl. iii. 357, pl. 33. Herr.-Schæff. Eur. Schmett. ii. 244, 185.

Noctua Arundineti, Sepp, Ins. iv. pl. 20, f. 6, 7.

Noctua geminipuncta, Hatcher, Ent. Trans. i. 327, pl. 237, 9, f. 2. Haw. Lep. Brit. 45.

Nonagria geminipuncta, Steph. Ill. Brit. Haust. iii. 79; Cat. Brit. Lep. 122.

a—e. England. Presented by Mr. Longley.

f. England. Presented by S. Stevens, Esq.

g—o. England. From Mr. Stephens' collection.

p, x. Europe. From M. Becker's collection.

Group 4.

Corpus sat robustum. Palpi porrecti, caput superantes; articulus 3us breviusculus. Abdomen alas posticas triente superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. *Mas*.—Antennæ serratæ.

Body rather stout. Palpi porrect, extending beyond the head; third joint rather short. Abdomen extending for full one-third of its length beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings like those of the following group. *Male*.—Antennæ distinctly serrated.

10. NONAGRIA NEXA.

Cervina; abdomen testaceum; alæ anticæ gutta strigaeque angulata clavata discalibus albis nigro submarginatis; posticæ subtectæ, margine latissimo cinereo.

Noctua nexa, Hübn. Samml. Eur. Schmett. Noct. f. 395.

Nonagria nexa, Treit. Schmett. Eur. ii. 195; Suppl. 97. Frey. Neu. Beit. Schmett. ii. pl. 136. Boisd. Ind. Méth. 134, 1083. Herr.-Schæff. Eur. Schmett. ii. 243, 181; ii. Noct. pl. 67, f. 342, 343. Guén. Ann. Soc. Ent. Fr. vi. 237; Noct. i. 107, 169.

North Germany. North France.

Group 5.

Corpus robustum. Palpi porrecti, validi, caput paullo superantes; articulus 3us minimus. Abdomen alas posticas dimidio superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocres; anticæ apud costam subrectæ, apice angulatæ, margine exteriori vix obliquo. Mas.—Antennæ subciliatæ.

Body stout. Palpi porrect, stout, extending a little beyond the head; third joint very minute. Abdomen extending for about half its length beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately long and broad. Fore wings almost straight in front, angular at the tips, very slightly oblique along the exterior border. Male.—Antennæ minutely ciliated. Female.—Antennæ simple.

11. NONAGRIA CANNÆ.

Pallide cervina; abdomen pallidissime cervinum; alæ anticæ linea transversa arcuata exteriori e punctis nigricantibus; posticæ subcinereæ, ciliis albidis.

———, Engr. Pap. d'Eur. 501, a—d.

Noctua Arundinis, Hübn. Samml. Schmett. Eur. Noct. f. 386, 387.

Nonagria Cannæ, Treit. Schmett. Eur. ii. 325. Dup. Hist. Nat. Léop. Fr. iv. 87, pl. 106; Suppl. iii. 361, pl. 33. Boisd. Ind. Méth. 135, 1086. Guén. Ann. Soc. Ent. Fr. vi. 237; Noct. i. 108, 170. Westw. & Humph. Brit. Moths, i. pl. 46, f. 11. Steph. Cat. Brit. Lep. 122. Herr.-Schæff. Schmett. Eur. ii. 243, 183; ii. Noct. pl. 69, f. 354, 355.

Noctua Algæ, *Esp. Schmett.* pl. 140, f. 1, 2. *Bork. Eur. Schmett.* 319.

Leucania Cannæ, *Meig. Syst. Besch. Eur. Schmett.* iii. 171, 14, pl. 108, f. 16.

a—g. England. From Mr. Stephens' collection.

h, i. England. From Mr. Foxcroft's collection.

j. England.

k. Europe. From M. Becker's collection.

12. NONAGRIA SPARGANII.

Pallidissime cervina; alæ anticæ gutta maculaque arcuata discalibus lineaque e punctis exteriori transversa abbreviata arcuata nigricantibus; posticæ testaceo-albidæ.

———, *Naturf.* 1777, 30, pl. 3, f. 1. *Engr. Pap. d'Eur.* 502, a.

Noctua Sparganii, *Esp. Schmett.* pl. 148, f. 2, 3. *Bork. Eur. Schmett.* 320. *Hüb. Samml. Eur. Schmett. Noct.* i. f. 549, 550.

Nonagria Sparganii, *Treit. Schmett. Eur.* ii. 323; *Suppl.* 78. *Frey. Neu. Beit. Schmett.* i. pl. 88. *Dup. Hist. Nat. Lép. Fr.* iv. 92, pl. 106. *Boisd. Ind. Méth.* 135, 1087. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 108, 171. *Herr.-Schæff. Eur. Schmett.* ii. 243, 182; ii. *Noct.* pl. 69, f. 352, 353.

Leucania Sparganii, *Meig. Syst. Besch.* iii. 172, 15, pl. 109, f. 2.

a, b. Europe. From M. Becker's collection.

13. NONAGRIA TYPHÆ.

Cervina; abdomen albido-testaceum; alæ anticæ vitta diffusa discali, strigis lanceolatis submarginalibus guttisque marginalibus nigro-fuscis, venis albidis; posticæ testaceo-albidæ.

———, *Naturf.* 1777, 30, pl. 3, f. 2, 4. *Engr. Pap. d'Eur.* 502, b—f.

Noctua Typhæ, *Esp. Schmett.* pl. 140, f. 3—5. *Bork. Eur. Schmett.* 321. *Hüb. Samml. Eur. Schmett. Noct.* f. 415. *Haw. Lep. Brit.* 35.

Nonagria Typhæ, *Treit. Schmett. Eur.* ii. 327; *Suppl.* 99. *Dup. Hist. Nat. Lép. Fr.* iv. 94, pl. 106. *Frey. Neu. Beit. Schmett.* i. pl. 89. *Steph. Ill. Brit. Haust.* iii. 71. *Boisd. Ind. Méth.* 135, 1088. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 108, 172. *Herr.-Schæff. Eur. Schmett.* ii. 244, 184; ii. *Noct.* pl. 68, f. 349—351.

Noctua Arundinis, *Fabr. Mant. Ins.* ii. 141, 54; *Ent. Syst.* iii. 2, 30, 71.

Phalæna-Noctua Arundinis, *Gmel. ed. Syst. Nat.* i. 5, 2546, 1051.

Leucania Typhæ, *Meig. Syst. Besch. Eur. Schmett.* iii. 172, 16, pl. 108, f. 10.

Var. Nonagria fraterna, *Kinderm.*

a—m. England. From Mr. Stephens' collection.

n—p. England.

q—s. Europe. From M. Becker's collection.

14. NONAGRIA LUTOSA.

Testacea aut pallide cervina; abdomen albidum; alæ punctis exterioribus nigricantibus; anticæ strigis diffusis cinereis; posticæ albidæ aut subcinereæ.

Noctua lutosa, *Hübner. Samml. Eur. Schmett. Noct.* f. 232.

Noctua crassicornis, *Haw. Lep. Brit.* 173, 36.

Nonagria vectis, *Curt. Brit. Ent.* pl. 459.

Nonagria crassicornis, *Steph. Ill. Brit. Haust.* iii. 72; *Cat. Brit. Lep.* 122. *Guén. Noct.* i. 110, 177.

Nonagria pilicornis, *Steph. Ill. Brit. Haust.* iii. 71, pl. 29, f. 1.

Nonagria Cannæ, *Steph. Ill. Brit. Haust.* iii. 73.

Nonagria Bathyerga, *Boie, Isis. Frey. Neu. Beit. Schmett.* ii. pl. 170, f. 1. *Guén. Ann. Soc. Ent. Fr.* vi. 238.

Leucania Bathyerga, *Boisd. Ind. Méth.* 133, 1068. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 343, pl. 32. *Herr.-Schæff. Eur. Schmett.* ii. 232, 153; ii. *Noct.* pl. 61, 62, f. 307, 312, 13.

Nonagria lutosa, *Guén. Noct.* i. 110, 177.

a. England. Presented by S. Stevens, Esq.

b—n. England. From Mr. Stephens' collection.

Group — ?

15. NONAGRIA RUSSA.

Sordide rufo-testacea; ciliæ concolores; alæ anticæ puncto medio nigricante.

Nonagria Russa, *Eversm. Bull. Soc. Imp. Nat. Mosc.* xx. 3, 79, 16.

Sarepta.

North America.

Group 1.

Like the first European group.

16. NONAGRIA INQUINATA.

Testacea; alæ anticæ cervino conspersæ, strigis guttularibus discalibus punctisque marginalibus nigris; posticæ albidæ.

Nonagria inquinata, Guén. Noct. i. 104, 159.

a. New York. Presented by E. Doubleday, Esq.

17. NONAGRIA ENERVATA.

Cervino-fusca; abdomen pallide cinereum; alæ anticæ innotatæ, posticæ pallide cinereæ.

Nonagria enervata, Guén. Noct. i. 105, 163.

Var. *Pallide cervina; abdomen et alæ posticæ pallidissima; alæ nitentes.* Fœm.—*Alæ anticæ linea basali nigricante, venis exterioribus fuscescentibus punctis marginalibus fuscis elongatis; posticæ marginibus, late fuscescentibus.*

Pale fawn-colour. Abdomen and hind wings very pale. Wings shining. *Female*.—Fore wings with a basal blackish line; exterior veins brownish; marginal brown points elongated. Hind wings with broad brownish borders. Length of the body 5—5½ lines; of the wings 11—12 lines.

a—c. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

18. NONAGRIA FODIENS.

Pallide cervina; abdomen canescens; alæ anticæ subconsersæ, macula divisa discali lineisque duabus transversis exterioribus guttularibus necnon guttis marginalibus nigris, lineolis submarginalibus nigricantibus albido marginatis; posticæ albæ.

Nonagria fodiens, Guén. Noct. i. 105, 164.

a—e. Florida. Presented by E. Doubleday, Esq.

South America.

Group 1.

Like the third European group.

19. NONAGRIA STILLATA.

Mas. *Antennæ ciliatæ ; alæ anticæ nigricante cinereæ, striga discali obscuriore, gutta duplicata alba nigro marginata, guttis exterioribus nigris ; posticæ albæ, cinereo marginatæ.*

Nonagria stillata, Guén. Noct. i. 107, 168.

Brazil ?

Group 2.

Alæ robustæ, villosæ.

Zeuzeræ affinis ? Guén.

Wings, the hind pair especially, stouter and more robust than in the other *Nonagriæ*.

20. NONAGRIA OSSEA.

Ochraceo-alba ; alæ anticæ nigro subconsersæ, gutta discali guttisque marginalibus nigris ; posticæ subobscuriores.

Nonagria ossea, Guén. Noct. i. 109, 174.

Brazil.

Group 3.

Antennæ longæ.

Antennæ much longer than in the other species.

Allied to the Pyralites ?

21. NONAGRIA ? SACCHARI.

Testacea ; palpi longi (?) ; antennæ longæ ; alæ anticæ nigro consersæ ; vittis tribus incompletis cinereis, gutta discali guttis exterioribus punctisque marginalibus nigris ; posticæ pallidiores.

Phalæna-Noctua Sacchari, Anon. Ins. Surin. 135, pl. 64.

Surinam. The larva feeds on the pith of the sugar-cane (*Saccharum Officinarum*).

Africa.

Group 1.

22. NONAGRIA? VUTERIA.

Cervina; *alæ anticæ guttis duabus discalibus punctisque marginalibus nigris*; *posticæ albæ*.

Phalæna Vuteria, *Stoll, Suppl. Cram. Pap. Exot.* iv. 161, pl. 36, f. 5.

Nonagria Vuteria, *Guén. Noct.* i. 110, 175.

Cape.

This species is perhaps allied to the genus *Antheua* (Cat. Lep. Het. 1st Ser. 687, 766), which seems to connect the *Arctiidae* with the *Leucanidae*.

Group 2.

Corpus sat validum. Proboscis breviuscula. Palpi ascendentes, caput paullo superantes; articulus 3us conicus minimus. Antennæ graciles, corporis dimidio vix longiores. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ.

Body rather stout. Proboscis rather short. Palpi obliquely ascending, extending a little beyond the head; third joint conical, very small. Abdomen hardly extending beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings moderately broad.

23. NONAGRIA INTESTATA.

Pallide testacea; *alæ fusco subconspersæ*; *posticæ albæ*.

Pale testaceous. Wings thinly and very minutely speckled with brown. Hind wings white. Length of the body 5 lines; of the wings 11 lines.

a. South Africa. Presented by Dr. A. Smith.

Australia.

Group 1.

Like the third European group.

24. NONAGRIA ABDOMINALIS.

Pallide testacea, sat robusta; abdomen fulvum, longiusculum, apice albidum; pedes antici pilosissimi; alæ brevisculæ; anticæ innotatæ; posticæ albæ, iridescentes, margine subtestacæ.

Pale testaceous, rather stout. Abdomen tawny, rather long, whitish at the tip. Fore legs very pilose. Wings rather short, Fore wings without any markings. Hind wings white, very pearly, slightly testaceous on the border. Length of the body 6 lines; of the wings 12 lines.

a. New Holland.

Genus 11. AITETA.

Corpus crassum. Caput magnum. Proboscis mediocriter longa. Palpi ascendentes; articulus 3us cylindricus, 2i quadrante non brevior. Antennæ simplices, robustæ, corporis dimidio non longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori perobliquo.

Body thick. Head large. Proboscis moderately long. Palpi ascending; third joint cylindrical, full one-fourth of the length of the second. Antennæ simple, robust, about half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings rather narrow. Fore wings straight in front, rounded at the tips, very oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote.

1. AITETA MUSCULINA.

Pallide murina; caput et thorax paullo obscuriora; alæ anticæ gutta discali punctoque posteriore exteriori nigris; posticæ subtus albidæ.

Pale mouse-colour. Head and thorax a little darker. Fore wings with a black discal dot, and with a black point near the hind part of the exterior border; under side paler exteriorly. Hind wings whitish beneath. Length of the body 7 lines; of the wings 15 lines.

a. Philippine Islands. From Mr. Cuming's collection.

Genus 12. PROXENUS.

Corpus sat gracile. Palpi porrecti; articulus 3us cylindricus. Antennæ graciles, simplices, corporis dimidio multo longiores. Abdomen alas posticas triente superans. Alæ anticæ sat angustæ, apud costam subrectæ, apice subobtusæ, margine exteriori vix obliquo.

Nonagria, *Treit.*; *Frey.*; *Guén.*

Proxenus, *Herr.-Schæff. Eur. Schmiett.* ii. 240.

Body rather slender. Palpi porrect; third joint cylindrical. Antennæ slender, simple, much more than half the length of the body. Abdomen extending for full one-third of its length beyond the hind wings. Fore wings rather narrow, nearly straight in front, somewhat obtuse at the tips, hardly oblique along the exterior border.

1. PROXENUS HOSPES.

Fuscus; alæ anticæ venis nigro alboque obsolete irroratis, striga exteriori fulva, maculis discalibus duabus nigro indicatis; posticæ albæ, apud apices fuscescentes.

Nonagria hospes, *Treit. Schmiett. Eur. Suppl.* 90. *Frey. Neu. Beit. Schmiett.* pl. 21. *Guén. Noct.* i. 109, 173.

Proxenus hospes, *Herr.-Schæff. Schmiett. Eur.* ii. 240, 176; ii. *Noct.* pl. 71, f. 366.

Sicily.

Genus 13. TIMORA.

Mas. Antennæ breves, vix pubescentes. Tibiæ anticæ unguiculis duobus inæqualibus distinctis.

Nonagria, p., *Guén.*

Antennæ short, hardly pubescent in the male. Fore tibiæ with two distinct unequal claws.

1. TIMORA SENEGALENSIS.

Flavido-albida; thorax antice fusco varius; alæ nitentes; anticæ roseo conspersæ, vitta lata nigricante lineam albam strigamque, roseam includente, guttis apicalibus nigris; posticæ albæ, apice nigro guttatæ.

Nonagria Senegalensis, *Guén. Noct.* i. 110, 176.

Senegal.

Genus 14. ESCHATA.

Corpus sat validum. Caput antice conicum. Proboscis brevis. Palpi porrecti, lanceolati, caput superantes; articulus 3us acuminatus, 2i quadrante brevior. Antennæ simplices, sat validæ, corporis dimidio paullo breviores. Abdomen alas posticas paullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ argenteæ, vix falcatae, costa vix convexa, margine exteriori vix obliquo.

Body moderately stout. Head conical in front. Proboscis short. Palpi porrect, lanceolate, extending somewhat beyond the head; third joint acuminate, less than one-fourth of the length of the second. Antennæ simple, rather stout, a little less than half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings silvery, hardly convex in front, very indistinctly falcate, almost rectangular at the tips; exterior border hardly oblique; fourth inferior vein nearer than usual to the third.

1. ESCHATA GELIDA.

Alba; alæ anticæ argenteæ, apud margines nigro conspersæ, lineis duabus testaceis transversis exterioribus undulatis. Var. β . *Corpus pallide cervinum; alæ anticæ apud discum cervinæ et subauratæ, ciliis auratis.*

White. Fore wings silvery, speckled with black along the exterior border and towards the tip of the costa, with two testaceous transverse exterior undulating lines, the inner one much retracted in front and ending at the middle of the costa; ciliæ slightly gilded hindward. Var. β . Body pale fawn-colour. Fore wings with the disk mostly fawn-colour, and slightly gilded; ciliæ brightly gilded. Length of the body $5\frac{1}{2}$ — $6\frac{1}{2}$ lines; of the wings 12—14 lines.

a, b. Silhet. From the Rev. J. Stainforth's collection.

c. Hindostan. From Archdeacon Clerk's collection.

Genus CHASMINA.

This genus, included in the Synopsis with the *Leucanidæ*, appears to be nearer allied to the *Glottulidæ*, and is therefore transferred to that family.

Genus 15. CONTREBIA.

Mas. Corpus sat validum. Caput breve. Proboscis mediocriter longa. Palpi ascendentes, breves, pilosi; articulus 3us minimus. Antennæ graciles, subciliatæ, corporis dimidio non breviores. Abdomen longum, lineare, alas posticas dimidio superans. Pedes longi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ; anticæ subhamatæ, acutæ, apud costam rectæ, margine exteriori subconvexo mediocriter obliquo.

Male. Body moderately stout. Head short. Proboscis moderately long. Palpi ascending, short, pilose; third joint very minute. Antennæ slender, minutely ciliated, full half the length of the body. Abdomen long, linear, extending for half its length beyond the hind wings. Legs long, rather slender; hind tibiæ with four long spurs. Wings rather long, moderately broad. Fore wings very slightly hooked, straight in front, acute at the tips, moderately oblique and slightly convex along the exterior border; fourth inferior vein extremely remote from the others.

1. CONTREBIA EXTREMA.

Pallide cinerea, fusco subconspersa; alæ anticæ lituris nonnullis anticis vittaque apud marginem interiorem fuscis; posticæ fusco-cinereæ.

Pale cinereous, very minutely speckled with brown. Fore wings with some slight brown marks in front, and with an irregular brown stripe near the interior border. Hind wings brownish cinereous. Length of the body 9 lines; of the wings 18 lines.

a. Honduras. From Mr. Dyson's collection.

Genus 16. OBRIMA.

Mas. Corpus sat validum. Proboscis breviuscula. Palpi validi, ascendentes; articulus 3us lanceolatus, 2i quadrante brevior. Antennæ graciles, simplices, corporis dimidio paullo longiores. Abdomen oblanceolatum, alas posticas dimidio superans. Pedes longi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ acuminatæ, subtus basi fasciculatæ, apud costam rectæ, margine exteriori subobliquo.

Male. Body moderately stout. Proboscis rather short. Palpi stout, ascending to the vertex; third joint lanceolate, less than one-

fourth of the length of the second. Antennæ slender, simple, a little more than half the length of the body. Abdomen oblanceolate, extending for half its length beyond the hind wings. Legs long, rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings acuminate, straight in front, slightly oblique along the exterior border, tufted beneath at the base; fourth inferior vein moderately remote from the others, which are approximate.

This genus has some characters in common with the *Noctuities* of the second group.

1. OBRIMA PYRALOIDES.

Testacea; palpi fulvi, apice testacei; pedes ex parte fulvi; alæ posticæ albidæ, testaceo marginatæ.

Testaceous. Palpi tawny, with testaceous tips. Legs mostly tawny. Hind wings whitish, with testaceous borders. Length of the body 8 lines; of the wings 16 lines.

a. Honduras. From Mr. Dyson's collection.

Genus 17. DEINOPA.

Fœm. Corpus gracile. Proboscis brevis. Palpi ascendentes, sat graciles; articulus 3us minutus, conicus, 2i quadrante brevior. Antennæ simplices, graciles, corpore vix breviores. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ acuminatæ et quadratæ, apud costam subrectæ, margine exteriori subobliquo vix undulato.

Female. Body slender. Proboscis short. Palpi ascending, rather slender; third joint minute, conical, not one-fourth of the length of the second. Antennæ simple, slender, nearly as long as the body. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings nearly straight in front, rectangular at the tips, slightly oblique and very slightly undulating along the exterior border; first, second and third inferior veins approximate; fourth very remote.

1. DEINOPA NOTABILIS.

Pallide cervina; caput et thorax anticus ferrugineo-fusca; alæ anticæ gutta discali maculaque apud angulum interiorem fuscis, punctis marginalibus nigricantibus; posticæ cinereæ.

Pale fawn-colour. Head and fore part of the thorax ferruginous-brown. Fore wings with a brown discal dot, with blackish marginal points, and with a brown spot by the interior angle. Hind wings cinereous. Length of the body $3\frac{1}{2}$ lines; of the wings 8 lines.

a. Santarem. From Mr. Bates' collection.

Genus 18. LEUCOPHLEBIA.

Corpus robustum. Proboscis brevis. Palpi breves, validi, pilosi, caput non adæquantes; articulus 3us minimus. Antennæ corporis dimidio paullo breviores. Abdomen alas posticas dimidio superans. Pedes validi; tibiæ posticæ calcaribus quatuor medio-criter longis. Alæ longæ, angustæ, dense vestitæ; anticæ lanceolatae, acuminatae, apud costam subrectæ, margine exteriori per-obliquo. *Mas.*—Antennæ robustæ, serratae, ciliatae. *Fœm.*—Antennæ validæ, simplices.

Leucophlebia, *Westw. Cab. Orient. Ent.* 46.

Body stout. Proboscis short. Palpi stout, short, pilose, not extending so far as the head; third joint very minute. Antennæ a little less than half the length of the body. Abdomen extending for about half its length beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings long and narrow, thickly clothed. Fore wings lanceolate, acuminate, nearly straight in front, extremely oblique along the exterior border; first, second and third inferior veins rather remote from each other; third more than twice further from the fourth than from the second. *Male.*—Antennæ very stout, serrated, ciliated. *Female.*—Antennæ stout, simple.

This genus is very remote from the other *Leucanidæ*, and has some affinities with the *Bombycites*, but hardly belongs to any described family of *Lepidoptera Heterocera*.

1. LEUCOPHLEBIA LINEATA.

Mas. *Rosea, vitta cervina; alæ anticæ vitta dentata flavescens: posticæ luteæ, roseo marginatæ.* *Fœm.*—*Corpus albido-testaceum; thoracis discus ferrugineus; alæ anticæ venis 2a 3aque inferioribus albis.*

Leucophlebia lineata, *Westw. Cab. Orient. Ent.* pl. 22.

a. Nepaul. Presented by Major-General Hardwicke.

b. North India.

c. North India.

δ	δ	δ	δ	δ
α	α	α	α	α
δ	δ	δ	δ	δ
α	α	α	α	α
δ	δ	δ	δ	δ
α	α	α	α	α
δ	δ	δ	δ	δ
α	α	α	α	α

Fam. 2. GLOTTULIDÆ.

Corpus validum aut gracile. Proboscis brevis. Palpi porrecti, breves; articulus 3us minimus. Antennæ sæpissime simplices. Abdomen non elongatum. Pedes non longi. Alæ latiusculæ; anticæ læte signatæ aut nigræ.

Glottulidæ, *Guén. Noct. i.* 112.

Body stout or slender. Proboscis short. Palpi porrect, short; third joint very small. Antennæ very generally simple. Abdomen not long. Legs of moderate length. Wings generally rather broad. Fore wings black, or with bright colours.

The genus *Callyna*, which Guénée includes in this family, seems rather to belong to the second group of *Noctuities*.

A. Alæ posticæ abdomen non superantes.

A. Corpus robustum.

a. Thorax non squamosus.

a. Thorax non hirsutus.

i. Tibiæ posticæ calcaribus longis.

* Alæ anticæ margine exteriori recto obliquo.

1. POLYTELA, *Guén.*

** Alæ anticæ margine exteriori convexo, vix obliquo.

6. FRACARA, *Walk.*

ii. Tibiæ posticæ calcaribus parvis. 2. GLOTTULA, *Guén.*

b. Thorax hirsutus. - - 3. EUTHISANOTIA, *Hübner.*

B. Thorax squamosus.

a. Palpi capite arcte applicati. - 7. CHASMINA, *Walk.*

b. Palpi capite non arcte applicati.

i. Antennæ sat validæ. - - 8. BÆCULA, *Walk.*

ii. Antennæ graciles. - - 9. DANDACA, *Walk.*

B. Corpus vix robustum.

A. Alæ anticæ margine exteriori obliquo. 10. EUDIPNA, *Walk.*

B. Alæ anticæ margine exteriori valde obliquo.

11. CUBENA, *Walk.*

C. Corpus sat gracile.

A. Alæ non longiusculæ.

a. Antennæ non pectinatæ.

i. Antennæ non serratæ. - - 4. EUDRYAS, *Boisd.*

ii. Antennæ maris serratæ. - 5. EUGLYPHIA, *Hübner.*

b. Antennæ maris pectinatæ. - - 12. BETUSA, *Walk.*

B. Alæ longiusculæ. - - 13. MCENAS, *Hübner.*

B. Alæ posticæ abdomen superantes. - - 14. CISSUSA, *Walk.*

Genus 1. POLYTELA.

Corpus sat validum. Proboscis breviuscula. Palpi breves, validi, pilosi, porrecti, caput vix superantes; articulus 3us minimus. Antennæ setaceæ, simplices, mediocres. Abdomen alas posticas perpaullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocres; anticæ apud costam rectæ, apice rotundatæ, margine exteriori mediocriter obliquo.

Polytela, *Guén. Noct.* i. 113.

Body moderately stout. Proboscis rather short. Palpi short, stout, pilose, porrect, hardly extending beyond the head; third joint very minute. Antennæ setaceous, moderately long and slender. Abdomen extending very little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border.

1. POLYTELA GLORIOSÆ.

Cinereo-nigra; caput apud antennis luteo biguttatum; thorax antice cyanescens, postice luteo bimaculatus; abdomen apice croceum; alæ anticæ fasciis denticulatis atris, lineis transversis undulatis guttisque luteo-testaceis, strigis coccineis, maculis duabus marginalibus testaceis ocellisque duabus discalibus; posticæ cinereæ, luteo ciliatæ.

Bombyx Gloriosæ, *Fabr. Sp. Ins.* ii. 205, 150; *Mant. Ins.* ii. 133, 211; *Ent. Syst.* iii. 1, 484, 242. *Oliv. Enc. Méth.* v. 102, 266.

Phalæna-Bombyx Gloriosæ, *Gmel. ed. Syst. Nat.* i. 5, 2440, 578.

Polytela Gloriosæ, *Guén. Noct.* i. 113, 179.

a, b. Canara. Presented by S. N. Ward, Esq.

c, d. Ceylon. Presented by R. Templeton, Esq.

e. Madras. Presented by W. Elliott, Esq.

f, g. North India. Presented by General Hearsay.

h. North India. Presented by E. Doubleday, Esq.

i. North Bengal. Presented by W. W. Saunders, Esq.

j, k. North India. From Mr. Stevens' collection.

l. ———? From Mr. Milne's collection.

m. ———?

2. POLYTELA FLORIGERA.

Cyaneo-nigra ; proboscis testacea ; thorax croceo biguttatus ; abdomen apice croceum ; alæ anticæ basi croceo uniguttatæ, fasciis denticulatis atris lineisque transversis undulatis albido-ferrugineis, macula apicali albida croceo marginata ; posticæ nigro-cinereæ.

Polytela florigera, Guén. Noct. i. 114, 180.

Hindostan.

Genus 2. GLOTTULA.

Corpus validum. Proboscis brevis. Palpi breves, pilosi, caput perpaullo superantes ; articulus 3us brevissimus. Antennæ breves, simplices, submoniliformes. Abdomen alas posticas triente superans. Pedes sat validi ; tibiæ posticæ calcaribus quatuor parvis. Alæ mediocriter latæ ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori mediocriter obliquo.

Glottula, Guénée, Ann. Soc. Ent. Fr. vi. 359 ; Noct. i. 114. Dup. Cat.

Cocytia, Treits.

Noctua et *Hadena*, Boisd.

Brithys, p., Hübn.

Brithya, Meig. ; Boisd. Ind. Méth.

Body stout. Proboscis short. Palpi pilose, short, extending very little beyond the head ; third joint very short. Antennæ short, simple, submoniliform. Abdomen extending for one-third of its length beyond the hind wings. Legs rather stout ; hind tibiæ with four short spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border ; first, second and third inferior veins approximate at the base ; fourth not very remote from the third.

Europe.

1. GLOTTULA PANCRATII.

Nigro-fusca ; antennæ fusæ ; abdomen albidum ; alæ anticæ fusæ, albo conspersæ, lineis duabus transversis denticulatis guttisque marginalibus nigricantibus, litura discali fasciaque vix determinata exteriori testaceis ; posticæ albæ, margine ex parte fuscescente.

Noctua Pancratii, *Cyrillo, Ent. Neapol.* pl. 12, f. 4. *Hübner. Samml. Eur. Schmett. Noct.* pl. 84, f. 391. *God. Hist. Nat. Lép. Fr.* ii. 272, pl. 70, f. 1, 2.

Brithys Pancratii, *Hübner. Verz. Schmett.* 226, 2264.

Cocytia Pancratii, *Treit. Schmett. Eur.* i. 182; *Suppl.* 29. *Frey. Neu. Beit. Schmett.* ii. pl. 147, f. 1.

Brithya Pancratii, *Herr.-Schæff. Eur. Schmett.* ii. 241, 178.

Glottula Pancratii, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 115, 181.

Noctua (Agrotis) Pancratii, *Meig. Syst. Besch.* iii. 93, 21, pl. 95, f. 3.

South Europe. North Africa.

a—c. Europe. From M. Becker's collection.

d. Greece. From Mr. Stevens' collection.

2. GLOTTULA ENCAUSTA.

Alæ anticæ pallide cervinæ, limbo acute albidior, stigmatibus reniformi limbum versus ferrugineo-cincto.

Noctua encausta, *Hübner. Samml. Eur. Schmett. Noct.* f. 392. *Dup. Hist. Nat. Lép. Fr.* iii. 86, pl. 78; *Suppl.* iii. 213, pl. 20.

Cocytia encausta, *Treit. Schmett. Eur. Suppl.* 29. *Boisd. Icon. Lep. d' Eur.* pl. 84.

Brithya encausta, *Boisd. Ind. Méth.* 117, 910. *Herr.-Schæff. Eur. Schmett.* ii. 241, 179; ii. *Noct.* f. 291.

Glottula encausta, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 116, 182.

Brithys encausta, *Hübner. Verz. Schmett.* 226, 2262.

Glottula Pancratii, var. ?

Sicily.

South America.

3. GLOTTULA ?? CHARACTERIA.

Alba; thorax fusco trivittatus; alæ anticæ maculis costalibus, vittisque duabus (antere ramosa) fuscis; posticæ maculis submarginalibus fuscis.

Phalæna-Noctua Characteria, *Stoll, Cram. Pap. Exot.* v. 154, pl. 34, f. 5.

Surinam.

This species and *G. Pancratii* can hardly belong to the same genus.

Africa and Asia.

4. GLOTTULA DOMINICA.

Nigro-fusca; antennæ subtus ferrugineæ; abdomen murinum; alæ anticæ lineis duabus transversis denticulatis guttisque marginalibus nigris, macula discali fasciaque exteriori ferrugineis; posticæ albæ, margine lato fuscescente.

Phalæna-Noctua Dominica, *Cram. Pap. Exot.* iv. 238, pl. 399, f. H.

Hadena Pancratii, *Boisd. Faun. Ent. Mad. Bomb. et Maur. Lép.* 91, 1.

Glottula Dominica, *Guén. Noct.* i. 116, 183.

Cape. Tranquebar. Isle of France.

a—c. Ceylon. Presented by R. Templeton, Esq.

d. Hindostan. From Archdeacon Clerk's collection.

e—g. North India. From Mr. Fraser's collection.

h—j. North India. From Mr. Stevens' collection.

Australia.

5. GLOTTULA ATRONITENS.

Nigra, nitens; proboscis testacea; abdomen cinereum; alæ anticæ linea transversa exteriori e guttis atris; posticæ sordidæ albidæ, cinereo marginatæ.

Black, shining. Proboscis testaceous. Abdomen cinereous. Fore wings with an exterior transverse line of deep black dots. Hind wings dingy whitish, with cinereous borders. Length of the body 5 lines; of the wings 12 lines.

a. Australia. From the Voyage of H.M.S. Rattlesnake.

Genus 3. EUTHISANOTIA.

Corpus robustum. Caput et thorax pilis rigidis erectis vestita. Proboscis breviuscula. Palpi validi, porrecti, obtusi, pilosi; articulus 3us conicus, minimus. Antennæ simplices. Abdominis latera fasciculata. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori mediocriter obliquo. *Mas.*—Abdomen alas posticas triente superans. *Fæm.*—Abdomen alas posticas non superans.

Body stout. Head and thorax thickly clothed with stout, rigid, upright hairs. Proboscis a little longer than the breadth of the head. Palpi stout, porrect, obtuse, hairy; third joint conical, very minute. Antennæ simple. Abdomen smooth above, with tufts of rigid hairs along each side. Legs stout, hairy; hind tibiæ with four rather long spurs. Wings rather broad. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border; second inferior vein as near to the third as to the first; third nearly four times further from the fourth than from the second. *Male*.—Abdomen extending for one-third of its length beyond the hind wings. *Female*.—Abdomen not extending beyond the hind wings.

1. EUTHISANOTIA TIMAIS.

Nigro-fusca; alæ anticæ maculis duabus discalibus ocellaribus guttisque apicalibus ferrugineis, maculis duabus magnis, una basali, 2a antica media, duabusque minoribus apicalibus, guttisque plurimis nigris.

- Phalæna-Noctua Timais, *Cram. Pap. Exot.* iii. 148, pl. 275, f. B.
 Euthisanotia Timais (Noctua bombycoides, *Diptera præcipua*),
Hübner. Samml. Exot. Schmett. iii. 39, 295, f. 589, 590.
 Xanthopastis Timais, *Hübner. Verz. Schmett.* 211, 2105.
 Phalæna-Noctua Amaryllidis, *Anon. Ins. Surinam*, i. 63, pl. 28.
 Glottula Timais, *Guén. Noct.* i. 116, 184.
Var.? Glottula heterocampa, *Guén. Noct.* i. 116, 185.

Blackish brown. Proboscis testaceous. Antennæ black above, tawny beneath. Fore wings above pale rose-colour, blackish brown with luteous spots at the base and along the exterior border, and with various blackish brown spots and dots, some of which are confluent in the disk, and are there accompanied by a few luteous spots. Length of the body 7—8 lines; of the wings 18—20 lines.

North America. Surinam.

- a.* Jamaica. From Mr. Gosse's collection.
b, c. St. Domingo. From Mr. Tweedie's collection.
d. West Coast of America. Presented by Capt. Kellett and Lieut. Wood.
e, f. ———? Presented by E. Doubleday, Esq.
g. ———? Presented by J. G. Children, Esq.
h, i. ———?

Genus 4. EUDRYAS.

Corpus gracile. Proboscis brevis. Palpi porrecti, sat graciles, caput perpaullo superantes; articulus 3us minimus. Antennæ graciles. Abdomen alas posticas perpaullo superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriori subobliquo. *Mas.*—Antennæ subciliatæ. *Fæm.*—Antennæ simplices.

Euthisanotia, p., *Hübner. Exot. Schmett.*

Eudryas, *Boisd. Spec. Gen. Léop.*

Body slender. Proboscis short. Palpi porrect, rather slender, extending very little beyond the head; third joint very minute. Antennæ slender. Abdomen extending very little beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings almost straight in front, rounded at the tips, slightly oblique along the exterior border; inferior veins much as usual. *Male.*—Antennæ very minutely ciliated. *Female.*—Antennæ simple.

1. EUDRYAS UNIO.

Pallide flava; caput nigricans; thorax vitta lata nigricante, lateribus albo fasciculatis; abdomen vitta interrupta nigricante, basi cristatum; alæ anticæ albæ, marginis antici bistriente basali posticæ bistriente apicali glaucescente puniceis, apice punicea fascia dentata albida, subtus flavæ maculis duabus connexis nigris fasciæ apicali rufescente; alæ posticæ flavæ, margine postico et apicali rufescente linea dentata saturatiore, subtus nigro unimaculatæ.

Euthisanotia Unio (Noctua bombycoides, Dipthera præcipua), *Hübner. Samml. Exot. Schmett.* iii. 12, 216, f. 431, 432.

Eudryas Unio, *Boisd. Spec. Gen. Léop.* i. pl. 14, f. 9.

The fore wings have an olive-green line along the coloured borders of the tip and hind borders, and on the disk are two half-concealed spots of the same colour corresponding to the two black spots beneath.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.

d. ——— ?

2. EUDRYAS GRATA.

Pallide flava; caput nigricans; thorax vitta lata nigricante, lateribus albo fasciculatis; abdomen vitta interrupta nigricante; alæ anticæ albæ maculis duabus anticis unaque postica fusciscentibus olivaceo marginatis, marginis antici plus dimidio basali glaucescente puniceo, apice margineque postico apicali puniceis cyaneo-lineatis olivaceoque intus marginatis, subtus flavæ apice obscuriores maculis duabus basique antica nigris; alæ posticæ flavæ, margine postico rufescente cyaneo vario, subtus nigro unimaculatæ.

Eudryas grata, MSS.

a. North America? Presented by E. Doubleday, Esq.

b. ———?

3. EUDRYAS STÆ. JOHANNIS.

Olivacea, subtus flava; thoracis latera albo fasciculata; abdomen flavum, fascia dorsali basali olivacea; alæ anticæ disco ad partem albo olivaceo vario, apice margineque postico apicali late puniceis cyaneo lineatis, subtus flavæ apice obscuriores maculis duabus nigris; alæ posticæ flavæ.

Eudryas Stæ. Johannis, Stephens, MSS.

Olive-green. Sides of the thorax tufted with white hairs. Abdomen yellow, with an olive-green dorsal stripe towards the base. Fore wings with some darker marks and with some white streaks towards the base, and with an oblique irregular white discal band, which is widened in front and includes some olive marks; a broad reddish band including an undulating bluish line along the tip and the apical part of the hind border; under side yellow, pale reddish towards the tips, and with two black spots, the one nearer the base much smaller than the other. Hind wings yellow. Legs white; femora and tibiæ striped with white. Length of the body 7 lines; of the wings 22 lines.

North America?

a. "Taken on the door of the church of Horsleydown by Mr. Bydder."

Genus 5. EUGLYPHIA.

Corpus sat gracile. Proboscis brevis. Palpi sat graciles, porrecti, vix pilosi, caput non superantes; articulus 3us minutus, conicus. Antennæ sat breves. Abdomen alas posticas superans. Pedes breviusculi, sat graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriori sat obliquo. *Mas.*—Antennæ serratæ, ciliatæ. *Fæm.*—Antennæ vix serratæ.

Bombyx, p., *Fabr.*; *Oliv.*

Diphthera, *Hübner. Exot. Schmett.*

Euglyphia, *Hübner. Verz. Schmett.* 203.

Noropsis, *Guén. Noct. i.* 117.

Body rather slender. Proboscis short. Palpi rather slender, porrect, hardly pilose, not extending beyond the head; third joint minute, conical. Antennæ rather short. Abdomen extending for nearly one-third of its length beyond the hind wings. Legs rather short and slender; hind tibiæ with four moderately long spurs. Wings rather broad. Fore wings almost straight in front, rounded at the tips, rather oblique along the exterior border; second inferior vein a little nearer to the first than to the third; third hardly twice further from the fourth than from the second. *Male.*—Antennæ ciliated, distinctly serrated. *Female.*—Antennæ hardly serrated.

1. EUGLYPHIA HIEROGLYPHICA.

Pallide flava; thorax vittis tribus nigris metallicis iridescentibus; abdomen nigricans; alæ anticæ striga basali vittisque duabus (una costali, altera obliqua angulata) nigris, metallico iridescentibus; posticæ nigricantes, ciliis albis.

Phalæna hieroglyphica, *Cram. Pap. Exot. ii.* 81, pl. 147, f. D.

Bombyx festiva, *Fab. Sp. Ins. ii.* 194, 109; *Mant. Ins. ii.* 127, 157;

Ent. Syst. iii. 1, 463, 177. *Oliv. Enc. Méth. v.* 85, 207.

Phalæna-Bombyx festiva, *Gmel. ed. Syst. Nat. i.* 5, 2425, 540.

Diphthera festiva elegans, *Hübner. Samml. Exot. Schmett. i. Lep. iv. Noctuæ, i. Bombycoides, ii. Diphtheræ, A. Festivæ, a, f.* 1—4.

Euglyphia elegans, *Hübner. Verz. Schmett.* 203, 2048.

Noropsis fastuosa, *Guén. Noct. i.* 117, 186.

a. Brazil. From Mr. Stevens' collection.

b, c. St. Domingo. From Mr. Tweedie's collection.

d, e. Jamaica.

Genus 6. FRACARA.

Corpus robustum, breviusculum. Antennæ corporis dimidio multo longiores. Abdomen alas posticas non superans. Alæ breviusculæ, latiusculæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori convexo vix obliquo.

Body robust, rather short. Antennæ much more than half the length of the body. Abdomen extending as far as the hind wings. Wings rather short and broad. Fore wings straight along the costa, rounded at the tips, convex and hardly oblique along the exterior border.

1. FRACARA VIRIDATA.

Viridis; antennæ luteæ; abdomen flavum fasciis luteis; pedes flavi; alæ anticæ cyaneo variæ, plaga discali guttas duas rufas albo marginatis includente nigra; posticæ nigricantes, flavo marginatæ.

Phalæna-Noctua viridata, Cram. Pap. Exot. iv. 44, pl. 311, f. D. Surinam.

Genus 7. CHASMINA.

Corpus sat validum. Caput breve. Proboscis mediocriter longa. Palpi ascendentes, arcte applicati; articulus 3us parvus, obtusus, 2i quadrante brevior. Antennæ simplices, graciles, corporis dimidio longiores. Thorax pilis appressis. Abdomen alas posticas vix superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriori mediocriter obliquo.

Body moderately stout. Head short. Proboscis moderately long. Palpi ascending to the vertex, closely applied to the head; third joint small, obtuse, less than one-fourth of the length of the second. Antennæ simple, slender, more than half the length of the body. Thorax with closely applied hairs. Abdomen hardly extending beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings almost straight in front, somewhat rounded at the tips; exterior border moderately oblique; first, second and third inferior veins approximate at the base; fourth remote.

1. CHASMINA CYGNUS.

Candida; caput antice luteum; palpi apice lutei; pedes antici lutei, nigro guttati; alæ nitentes, subargenteæ. Fœm.—Thorax et alarum margines subtestacei.

Pure white. Head luteous in front. Palpi with luteous tips. Fore legs luteous, with black dots. Wings shining, slightly silvery. *Female*.—Thorax and borders of the wings with a slight testaceous tinge. Length of the body $5\frac{1}{2}$ —6 lines; of the wings 13—14 lines.

a—c. North India. From Mr. Stevens' collection.

d. North India. From Mr. James' collection.

e. ——— ? From Mr. Milne's collection.

2. CHASMINA PAVO.

Glaucæ, fusco conspersa, subtus lutea; caput nigrum luteo fasciatum; palpi testacei, nigro vittati; antennæ fulvæ; thorax testaceo fasciatus; abdomen luteum, maculis ventralibus lateralibus nigris; tibiæ tarsique nigro varia; alæ anticæ fascia media ferruginea intus nigro marginata, dimidio apicali pallide carneo strigis guttisque atris viridi purpureoque ornatis, costæ dimidio basali luteo nigro-guttato; posticæ luteæ.

Glaucous, very minutely speckled with brown, luteous beneath. Head black above, with a luteous band. Palpi testaceous, striped above with black. Proboscis tawny. Antennæ dull tawny. Thorax with a slight testaceous band in front. Abdomen and hind wings luteous, the former with black spots along each side beneath. Tibiæ and tarsi with black spots and bands. Fore wings luteous and dotted with black along the basal part of the costa; apical half of the wings pale flesh-colour, divided from the glaucous part by a ferruginous band, which is bordered with black on its inner side; the apical half contains some black streaks and dots, which are spangled with emerald-green, or blue and purple. Length of the body 8 lines; of the wings 20 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Genus 8. BÆCULA.

Mas. Corpus robustum. Proboscis mediocriter longa. Palpi crassi, ascendentes, pilosi; articulus 3us minimus. Antennæ brevissime setosa-serratae, corporis dimidio multo longiores. Abdomen

alas posticas vix superans. Pedes robusti, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriori mediocriter obliquo.

Male. Body stout. Proboscis moderately long. Palpi thick, pilose, ascending; third joint very minute. Antennæ very minutely setose-serrate, much more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings rather broad. Fore wings hardly convex in front, rounded at the tips, moderately oblique and indistinctly convex along the exterior border; second and third inferior veins united at the base; fourth about twice further from the third than the first is from the second.

1. BÆCULA GALLOPAVO.

Mas. *Cervina*; thorax glauco-viridi conspersus; abdomen subcinereum; alæ anticæ nigro conspersæ, ex parte albide, purpureo ornatae, vitta arcuata nigra, apud costam viridi-cervinæ, apice margineque exteriori sordide albidis strigis maculisque viridi-fulvis; posticæ minus variæ.

Male. Fawn-colour. Plumes of the thorax, except in front, fringed with glaucous-green. Abdomen somewhat cinereous. Fore wings greenish fawn-colour in front, dingy whitish and with greenish fawn-coloured streaks and spots, and with darker dots about the tips and along the exterior border; disk partly whitish in the exterior part, speckled with black, adorned with a curved black stripe, and with purplish reflections. Hind wings much like the fore wings in colour, but without the black stripe, and with very few black speckles. Length of the body 9 lines; of the wings 22 lines.

a. Venezuela. From Mr. Dyson's collection.

2. BÆCULA? CUPENTIA.

Cervina; alæ anticæ fuscae, guttis nonnullis maculis apud marginem interiorem fasciisque tribus albis, fascia submarginali postice contracta; posticæ pallidiores, basi cervinæ.

Phalæna Cupentia, *Cram. Pap. Exot.* iii. 103, pl. 252, f. E.

Cænipeta Cupentia, *Hübner. Verz. Schmett.* 260, 2557.

Surinam.

Genus 9. DANDACA.

Fœm. Corpus robustum. Proboscis mediocriter longa. Palpi validi, ascendentes; articulus 3us minimus. Antennæ graciles, simplices, corpore vix breviores. Thorax squamosus. Abdomen alas posticas non superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriori subdenticulato subobliquo vix convexo.

Female. Body stout. Proboscis moderately long. Palpi stout, ascending; third joint very minute. Antennæ slender, simple, nearly as long as the body. Thorax squamose. Abdomen extending as far as the hind wings. Legs moderately stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, hardly convex and very slightly oblique along the exterior border, which is slightly denticulate; first, second and third inferior veins nearly contiguous at the base; third rather remote.

1. DANDACA COLUMBA.

Fœm. *Pallide glauco-viridis; caput et thorax anticus fusca, testaceo varia; abdomen iridescente-cinereum; alæ anticæ fascia, maculis costalibus punctisque ferrugineo-fuscis, fascia exteriori e maculis nigris, disco ex parte semihyalino; posticæ fuscae, disco basali hyalino.*

Female. Pale glaucous-green. Head and fore part of the thorax brown and testaceous. Abdomen, except at the base, iridescent-cinereous. Fore wings with a ferruginous-brown band before the middle, and with speckles and costal spots of the same hue; also with an imperfect oblique exterior band of black spots; part of the disk semihyaline. Hind wings brown, hyaline in the disk towards the base. Length of the body 5 lines; of the wings 14 lines.

a. North India. From Mr. James' collection.

Genus 10. EUDIPNA.

Corpus vix robustum. Palpi breves. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas non superans. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriori sat obliquo.

Acolasis, p., *Hübner. Verz. Schmett.* 256.

Body hardly stout. Palpi short. Antennæ simple, more than half the length of the body. Abdomen not extending beyond the hind wings. Wings rather broad. Fore wings nearly straight in front, rounded at the tips, moderately oblique along the exterior border.

1. EUDIPNA PHASIS.

Nigro-fusca; abdomen pallide fuscum; alæ anticæ pallide subpurpurascens viridi variæ, lineis transversis nigris unaque exteriore alba, plaga costali subapicali nigricante; posticæ apud discum cinereæ, fascia postica abbreviata testacea.

Phalæna Phasis, *Cram. Pap. Exot.* ii. 106, pl. 165, f. B.

Acolasis Phasis, *Hübner. Verz. Schmett.* 256, 2523.

Surinam.

2. EUDIPNA CEDICA.

Fusca; alæ anticæ gutta basali, lineis, fascia arcuata interiore, fascia exteriore fusco lineata antice furcata maculisque duabus submarginalibus albis; posticæ lineis submarginalibus testaceis, macula apud angulum interiorem alba.

Phalæna Cedica, *Cram. Pap. Exot.* iv. 42, pl. 310, f. E.

Surinam.

Genus 11. CUBENA.

Corpus vix robustum. Palpi caput superantes. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Alæ mediocriter latæ; anticæ apud costam subconvexæ, apice subrotundatæ, margine exteriore perobliquo.

Autographa, p., *Hübner. Verz. Schmett.* 251.

Body hardly stout. Palpi extending beyond the head. Antennæ simple, more than half the length of the body. Abdomen extending beyond the hind wings. Wings moderately broad. Fore wings slightly convex in front, slightly rounded at the tips, very oblique along the exterior border.

This genus does not seem to be allied to the *Plusiæ*, with which Hübner places it.

1. CUBENA POLYDAMIA.

Roseo-ferruginea; abdomen fuscum; alæ anticæ maculis, linea transversa interiore fasciisque duabus posticis abbreviatis exterioribus aurato-flavis; posticæ fuscae.

Phalæna-Noctua Polydamia, *Cram. Pap. Exot.* iv. 242, pl. 400, f. D.
Autographa Polydamia, *Hübner. Verz. Schmett.* 251, 2490.

Surinam.

Genus 12. BETUSA.

Mas. Corpus sat gracile. Proboscis breviuscula. Palpi porrecti, caput sat superantes; articulus 3us lanceolatus, 2o plus quadruplo brevior. Antennæ mediocriter pectinatae, corporis dimidio multo longiores. Thorax pilis longis vestitus. Abdomen basi fasciculatum, alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longissimis. Alæ latiusculæ, denticulatæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriori mediocriter obliquo; posticæ subtus fasciculo longo antico.

Male. Body rather slender. Proboscis rather short. Palpi porrect, extending somewhat beyond the head; third joint lanceolate, not one-fourth of the length of the second. Antennæ moderately pectinated, much more than half the length of the body. Thorax with long hairs. Abdomen extending as far as the hind wings, with a double tuft at the base. Legs slender; hind tibiæ with four very long spurs. Wings rather broad, denticulated. Fore wings nearly straight in front, rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins approximate at the base; fourth moderately remote. Hind wings with a tuft of long hairs in front beneath.

This genus apparently connects the first division of the *Noctuities* with the second, and also with the *Pyrallites*.

1. BETUSA PHASIANUS.

Mas. Testacea; caput et thorax anticus cervina; abdominis fasciculus pallide rufus; alæ anticæ saturate virides, strigis nigris cyaneo ornatis apud marginem exterioriorem subviolaceum, costa margineque interiore ex parte luteis; posticæ fuscae, basi pallidiores, apice testaceæ, maculis duabus nigris subapicalibus cyaneo ornatis.

Male. Testaceous. Head and fore part of the thorax fawn-colour. Tuft of the abdomen pale red. Fore wings deep green,

partly luteous along the costa and along the interior border, and with black blue-spangled streaks towards the exterior border, which is tinged with lilac, and divided by a luteous line from the fringe, which is still paler. Hind wings brown, paler towards the base, with two black blue-spangled spots near the tips, which are testaceous, and this hue extends in an attenuated streak along part of the exterior border, and is accompanied by a luteous line. Length of the body 7 lines; of the wings 18 lines.

a. Parà. In Mr. J. P. G. Smith's collection.

Genus 13. MAENAS.

Corpus sat gracile. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas non superans. Alæ longiusculæ, non latæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriori valde obliquo.

Maenas, Hübn. Verz. Schmett. 167.

Body rather slender. Antennæ simple, more than half the length of the body. Abdomen not extending beyond the hind wings. Wings rather long, not broad. Fore wings hardly convex in front, rounded at the tips, very oblique along the exterior border.

1. MAENAS VOCULA.

Alba; thorax guttis duabus anticis vittisque tribus fuscis; alæ anticæ plagis costalibus, vitta discali ramosa vittaque postica fuscis; posticæ guttis submarginalibus fuscis.

Phalæna-Noctua Vacula, Stoll, Cram. Pap. Exot. v. 143, pl. 31, f. 5.

Maenas Vacula, Hübn. Verz. Schmett. 167, 1727.

Cape.

2. MAENAS ZAIDE.

Rufescens; alæ anticæ vittis interruptis furcatis albis strigisque nonnullis fuscis; posticæ pallide fuscescentes, vitta abbreviata obscuriore, margine rufescente.

Phalæna Zaide, Stoll, Cram. Pap. Exot. v. 161, pl. 36, f. 6.

Maenas Zaide, Hübn. Verz. Schmett. 167, 1728.

Cape.

Genus 14. CISSUSA.

Corpus sat gracile. Palpi breves. Antennæ simplices, corporis dimidio paullo longiores. Alæ latiusculæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori sat obliquo vix convexo; posticæ abdomen paullo superantes.

Body rather slender. Palpi short. Antennæ simple, a little more than half the length of the body. Wings rather broad. Fore wings straight in front, rounded at the tips; exterior border moderately oblique, hardly convex. Hind wings extending a little beyond the abdomen.

1. CISSUSA SPADIX.

Nigro-fusca; abdomen ferruginosum; alæ anticæ guttis duabus subapicalibus nigris, fasciis quatuor rufescentibus, 3a abbreviata, 4a marginali; posticæ cinereæ.

Phalæna-Noctua Spadix, *Cram. Pap. Exot.* iii. 149, pl. 275, f. F. Virginia.

Fam. 3. APAMIDÆ.

Proboscis distincta. Palpi distincti, ascendentes. Pedes validi; tibiæ non spinosæ. Alæ anticæ obscure, deflexæ.

Noctuidæ, p., *Boisd.*

Hadenidæ, p., *Boisd.*

Orthosidæ, p., *Boisd.*

Size small, or moderate. Proboscis short, or hardly long. Palpi often of two colours, not long; second joint pilose. Antennæ crenulated or ciliated. Thorax robust, often crested. Legs stout; tibiæ not spinose. Fore wings oblong, rather thick, with distinct markings.

Apamidæ, *Guén. Noct.* i. 119.

Xylinidi, p., *Guén. Ann. Soc. Ent. Fr.* viii. 500. *Steph. Cat. Brit. Lep.* 81.

Apamidi, p., *Guén. Ann. Soc. Ent. Fr.* x. 237. *Steph. Cat. Brit. Lep.* 84.

Hadenidi, p., *Guén. Ann. Soc. Ent. Fr.* vii. 201. *Steph. Cat. Brit. Lep.* 91.

- A. Statura sat magna aut mediocris. Alæ latiusculæ; anticæ nittentes, nonnunquam læte designatæ. 1. GORTYNIDES, *Dup.*
 B. Alæ longiusculæ; anticæ strigatæ, ligni colores. 2. XYLOPHASIDES, *Guén.*
 C. Abdomen cristatum. Antennæ maris valde ciliatæ. 3. EPISEMIDES, *Guén.*
 D. Alæ anticæ apices versus obscuriores. - 4. APAMIDES, *Guén.*

Subfam. 1. GORTYNIDES.

Gortynides, *Duponch*; *Guén. Noct. i.* 120.

- A. Antennæ maris non pectinatæ.
 A. Proboscis breviuscula. - - - 1. GORTYNA, *Ochs.*
 B. Proboscis mediocriter longa.
 A. Pedes sat validi. - - - 2. HYDRÆCIA, *Guén.*
 B. Pedes graciles. - - - 4. MARTHULA, *Walk.*
 B. Antennæ maris subpectinatæ. - - 3. NEPHELODES, *Guén.*

Genus 1. GORTYNA.

Corpus validum. Proboscis breviuscula. Palpi validi, pilosi, ascendentes; articulus 3us minutus, conicus. Thorax subcristatus. Abdomen alas posticas plus triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriori subobliquo vix undulato. *Mas.*—Antennæ crenulatæ. *Fæm.*—Antennæ simplices.

Gortyna, *Ochs. Syst. Gloss. Schmett. Eur. iv. Treits. Boisd. Herr.-Schæff. Guénée, Ann. Soc. Ent. Fr. vi.* 329; *Noct. i.* 120.

Ochria, *Hübner. Verz. Schmett.* 233.

Gortyna et Celsia, *Steph.*

Xanthia et Polia, *Boisd.*

Body stout. Proboscis rather short. Palpi stout, pilose, ascending nearly to the vertex; third joint minute, conical. Thorax slightly crested. Abdomen extending for more than one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, slightly oblique and hardly undulating along the exterior border. *Male.*—Antennæ crenulated, or minutely ciliated. *Female.*—Antennæ simple.

Europe.

1. GORTYNA LUNATA.

Cinereo-ferruginea ; abdomen cervinum ; alæ anticæ ferruginæ, maculis tribus discalibus albis, 1a interiore postica quadripartita, 2a intermedia annulata, 3a exterior transversa subarcuata interlineata ; posticæ albidæ.

Noctua leucographa, *Scriba, Beit. Ins. Gesch.* iii. 252, pl. 18, f. 1.

Gortyna lunata, *Kinderm. & Treit. Frey. Neu. Beit. Schmett.* iii. 263, f. 1 ; 327, f. 3. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 466, pl. 41, f. 1. *Boisd. Ind. Méth.* 144, 1168. *Guén. Ann. Soc. Ent. Fr.* vi. 237 ; *Noct.* i. 121, 187. *Herr.-Schæff. Eur. Schmett.* ii. 219, 115 ; ii. *Noct.* pl. 23, 24, f. 114, 117, 118.

Var. Alæ anticæ elongatæ pallide flavidæ ferrugineoque variæ, maculis tribus ordinariis albidis, macula apicali flavescente, bistriga ferruginea ; posticæ albidæ ; caput et thorax omnino ferruginea.

Gortyna Borelii, *Pierret, Ann. Soc. Ent. Fr.* vi. 449, pl. 16, f. 5.

France. Corsica. Turkey.

2. GORTYNA XANTHENES.

Lutea, cinereo violaceo mixta ; alæ posticæ innotatæ, cinerascens.

Gortyna Xanthenes, *Germ. Faun. Ins. Eur.* xxii. pl. 22. *Herr.-Schæff. Eur. Schmett.* ii. 219, 114 ; ii. *Noct.* pl. 24, f. 119. *Guén. Noct.* i. 121, 188.

Sicily.

3. GORTYNA MÆSIACA.

Flava ; alæ anticæ acute fusco signatæ, areolis concoloribus, linea undulata basim versus fusco adumbrata ; posticæ albidæ, innotatæ.

Gortyna mæsiaca, *Frivaldsky, Herr.-Schæff. Eur. Schmett.* ii. 218, 113 ; ii. *Noct.* pl. 10, f. 50. *Guén. Noct.* i. 122, 189.

Gortyna flavago, *var.* ?

Balkan Mountains.

4. GORTYNA FLAVAGO.

Lutea, ferrugineo varia; abdomen basi albidum; alæ anticæ fulvo conspersæ, fasciis duabus ferrugineis, 1a interiore, 2a marginali apud costam luteo maculata, lineolis duabus transversis undulatis ferrugineis annulisque tribus nigricantibus; posticæ cinereo-albidæ, fascia subcinerea.

———, *Engr. Pap. d'Eur.* 517, a—e. *Harris, Aur.* pl. 35, f. a—c; *V. M.* 39.

Phalæna-Noctua rutilago, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1185.

Noctua flavago, *Wien. Verz.* 86, 5. *Esp. Schmett.* pl. 112, f. 2—4; pl. 176, f. 1. *Bork. Eur. Schmett.* 292. *Hübner. Samml. Eur. Schmett. Noct.* pl. 39, 186, 187. *Sepp. Ins.* i. pl. 3. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 116, f. 2.

Noctua rutilago, *Fabr. Mant. Ins.* ii. 160, 167; *Ent. Syst.* iii. 2, 75, 214.

Noctua ochracea, *Hübner. Beit. Gesch. Schmett.* pl. 2, m.

Noctua ochraceago, *Haw. Lep. Brit.* 234.

Gortyna flavago, *Treit. Schmett. Eur.* v. 2, 335, 3. *Boisd. Ind. Méth.* 144, 1167. *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 122, 190. *Steph. Ill. Brit. Ent. Haust.* iii. 70; *Cat. Brit. Lep.* 115. *Herr.-Schæff. Eur. Schmett.* ii. 218, 112. *Westw. & H. Brit. Moths*, i. 213, pl. 47, f. 16, 17.

Phalæna-Noctua Lappina, *Donov. Nat. Hist. Brit. Ins.* x. 35, pl. 340.

Ochria flavago, *Hübner. Verz. Schmett.* 233, 2338.

Noctua (Xanthia) flavago, *Meig. Syst. Besch.* iii. 165, 155, pl. 107, f. 6.

a—h. England. From Mr. Stephens' collection.

i—k. England.

l—q. Europe. From M. Becker's collection.

North America.

A. *Alæ anticæ albo maculatæ.*

A. *Alæ anticæ pallidæ.*

A. *Alæ anticæ fascia exteriori vix flexuosa.* - *rutila*, *Guén.*

B. *Alæ anticæ fascia exteriori valde flexuosa.* - *marginidens*, *Guén.*

B. *Alæ anticæ obscuræ.*

A. *Alæ posticæ non fasciatæ.* - - - *limpeda*, *Guén.*

B. *Alæ posticæ fasciatæ.* - - - *Nebris*, *Guén.*

B. *Alæ anticæ albo non maculatæ.* - - - *nitela*, *Guén.*

5. GORTYNA RUTILA.

Ferruginea ; thorax luteo fasciatus ; abdomen testaceum ; alæ anticæ ferrugineo conspersæ, fascia exteriori fusca, macula apicali flavescens, gutta basali necnon maculis guttisque discalibus albis ; posticæ testacæ.

Gortyna rutila, Guén. Noct. i. 123, 191.

a. Illinois. Presented by E. Doubleday, Esq.

b—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

6. GORTYNA MARGINIDENS.

Ferruginea ; thorax luteo fasciatus ; abdomen testaceum, apice ferrugineum ; alæ anticæ luteo subvariæ, gutta basali maculisque discalibus albis, lineis duabus transversis undulatis exterioribus fuscis, lineola subapicali flava ; posticæ testacæ, apud margines rufescentes.

Gortyna marginidens, Guén. Noct. i. 123, 192.

G. rutila, var. ?

a. Illinois. Presented by E. Doubleday, Esq.

7. GORTYNA LIMPIDA.

Fusca ; abdomen pallide fuscens ; alæ anticæ lituris duabus discalibus e guttis albis testaceo variis, linea transversa undulata exteriori pallide fusca ; posticæ albido-cinerascentes.

Gortyna limpida, Guén. Noct. i. 124, 193.

a—c. Illinois. Presented by E. Doubleday, Esq.

8. GORTYNA NEBRIS.

Fusca ; abdomen pallide cinerascens ; alæ linea transversa exteriori albida ; anticæ lituris duabus discalibus e guttis albis nonnunquam testaceo variis ; posticæ cineræ.

Gortyna Nebris, Guén. Noct. i. 124, 194.

a, b. United States. Presented by E. Doubleday, Esq.

9. GORTYNA NITELA.

*Fusca ; abdomen pallide fuscens ; alæ linea transversa obliqua
exteriore albida, macula discali obscure fusca ; posticæ pallide
fuscescentes.*

Gortyna Nitela, Guén. Noct. i. 124, 195.

a—e. Illinois. Presented by E. Doubleday, Esq.

Africa.

10. GORTYNA? TRINOTA.

*Ochracea ; alæ anticæ lineis duabus transversis fuscis, strigis dua-
bus guttaque interiore albis ; posticæ testaceæ, striga lineaque
exteriore fuscis.*

Noctua trinota, Herr.-Schæff. Lep. Exot. Sp. Nov. f. 126.

Cape.

Genus 2. HYDRÆCIA.

Corpus sat validum. Proboscis mediocriter longa. Palpi pilosi, ascendentes ; articulus 3us minutus, conicus. Antennæ longiusculæ. Abdomen alas posticas triente superans. Pedes sat validi ; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ ; anticæ apud costam rectæ, apice angulatæ, margine exteriore perpaullo obliquo. *Mas.*—Antennæ subciliatæ. *Fæm.*—Antennæ simplices.

Sideridis, p., et Lycophotia, p., Hübn. Verz. Schmett. 232.

Apamea, p., Treit. ; Dup. ; Meig. ; Steph. ; Westw. ; Frey.

Hydræcia, Guén. ; Boisd.

Gortyna, p., Herr.-Schæff.

Body moderately stout. Proboscis moderately long. Palpi pilose, ascending towards the vertex ; third joint minute, conical. Antennæ rather long. Abdomen extending for one-third of its length beyond the hind wings. Legs rather stout ; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, very slightly oblique along the exterior border ; inferior veins much as usual. *Male.*—Antennæ very minutely ciliated. *Female.*—Antennæ simple.

Europe.

Group 1.

1. HYDRÆCIA NICTITANS.

Rufo-cervina ; abdomen testaceum ; alæ anticæ lineis transversis undulatis annuloque discali saturatioribus, litura discali alba aut rufescente ; posticæ cinerascens margine testaceo.

- , *Engr. Pap. d'Eur.* 394, a—c.
Phalæna-Noctua nictitans, *Linn. Faun. Suec.* 1215. *Gmel. ed. Syst. Nat.* i. 5, 2562, 141.
Noctua nictitans, *Esp. Schmett.* pl. 125, f. 5. *Bork. Eur. Schmett.* 184.
Noctua chrysographa, *Wien. Verz.* 313, O. 20, 21. *Hübner. Samml. Eur. Schmett. Noct.* pl. 46, f. 221.
Noctua cinerago, *Fabr. Ent. Syst. Suppl.* 445.
Phalæna auricula, *Donov. Nat. Hist. Brit. Ins.* xii. 5, pl. 397, f. 3.
Noctua auricula, *Haw. Lep. Brit.* 232.
Sideridis nictitans, *Hübner. Verz. Schmett.* 232, 2329.
Apamea nictitans, *Treit. Schmett. Eur.* ii. 83. *Dup. Hist. Nat. Léop. Fr.* vii. 58, pl. 104, f. 2. *Steph. Ill. Brit. Ent. Haust.* iii. 7 ; *Cat. Brit. Lep.* 86. *Westw. & H. Brit. Moths*, i. 177, pl. 37, f. 3, 4.
Noctua (Apamea) nictitans, *Meig. Syst. Besch.* iii. 147, 117, pl. 106, f. 10.
Hydræcia nictitans, *Guén. Ann. Soc. Ent. Fr.* vi. vi. 237 ; *Noct.* i. 126. *Boisd. Ind. Méth.* 116, 899.
Var. Noctua erythrostigma, *Haw. Lep. Brit.* 240.
Gortyna nictitans, *Herr.-Schæff. Eur. Schmett.* ii. 219, 116.
Var. Gortyna nictitans var. lucens, *Klug. Herr.-Schæff. Eur. Schmett.* ii. 219, pl. 57, f. 285, 288.
———, *Engr. Pap. d'Eur.* 390, a, b ?
Noctua fucosa ? *Frey. Beit.* iii. 150, pl. 141.
a—m. England. From Mr. Stephens' collection.
n—r. England.
s—aa. Trenton Falls, New York. Presented by E. Doubleday, Esq.
bb. St. Martin's Falls, Albany River, Hudson's Bay. Presented by G. Barnston, Esq.
cc—ff. Nova Scotia. From Lieut. Redman's collection.
gg. Massachusetts. From Prof. Sheppard's collection.
hh. ——— ?

Group 2.

2. HYDRÆCIA CUPREA.

Fusca; thorax postice canus; tibiæ anticæ setis rufis; alæ anticæ cupreo-fuscæ, fascia latissima strigaeque transversa exteriori obscurioribus, ocellis duobus canis; posticæ pallide fuscæ, marginibus latis obscurioribus.

Noctua cuprea, *Wien. Verz.* Y. 3. *Hübner. Samml. Eur. Schmett.* 62.

Apamea cuprea, *Treit. Schmett. Eur.* ii. 125. *God. Hist. Nat. Lép.*

Fr. ii. 197, pl. 63. *Frey. Neu. Beit. Schmett.* pl. 75, f. 4.

Gortyna cuprea, *Boisd. Ind.* 144, 1165.

Hydræcia cuprea, *Guén. Ann. Soc. Ent. Fr.* vi. 237; *Noct.* i. 1, 127, 198. *Boisd. Ind.* 144, 1165.

Noctua hæmatitidea, *Esp. Schmett.* pl. 182, f. 4.

Lycophotia cuprea, *Hübner. Verz. Schmett.* 215, 2145.

a—d. Europe. From M. Becker's collection.

Group 3.

3. HYDRÆCIA VINDELICIA.

Fusca; abdomen cinerascens; alæ anticæ linea interiore transversa, fascia media antice furcata fasciæque marginali obscurioribus; posticæ cinerascens, fascia tenui discali obscuriore.

Noctua vindelicia, *Frey. Neu. Beit. Schmett.* vi. 82, pl. 531, f. 3.

Hydræcia vindelicia, *Herr.-Schæff. Eur. Schmett.* ii. 220, 118, f. 521—523. *Guén. Noct.* i. 127, 199.

Bavaria.

a, b. Europe. From M. Becker's collection.

Var. Alæ anticæ obscure fuscæ, fascia saturatiore, stigmatibus pallidioribus; posticæ pallide fuscæ. Long. alar. 22—24 lin.

Hydræcia Petasitis, *H. Doubleday, Zoologist*, v. 1914. *Steph. Cat. Brit. Lep.* 116.

c. England. From Mr. Carter's collection.

d. England. From Mr. Stephens' collection.

e, f. Scotland. From Mr. Foxcroft's collection.

4. HYDRÆCIA MICACEA.

Cervina ; abdomen testaceo-albidum ; alæ anticæ lineis transversis annuloque discali fuscis, fascia obliqua fuscescente ; posticæ testaceo-albidæ, linea media subundulata cervina.

—————, *Engr. Pap. d'Eur.* 407, a—c.

Noctua micacea, *Esp. Schmett.* pl. 145, f. 6. *Sepp. Ins.* iv. pl. 38, f. 67.

Gortyna micacea, *Treit. Schmett. Eur.* ii. 333. *Dup. Hist. Nat. Léop. Fr.* iv. 243, pl. 115. *Curt. Brit. Ent.* pl. vi. 252. *Steph. Ill. Brit. Haust.* iii. 69 ; *Cat. Brit. Lep.* 116. *Boisd. Ind. Méth.* 144, 1166.

Hydræcia micacea, *Guén. Ann. Soc. Ent. Fr.* vi. 237 ; *Noct.* i. 128, 200. *Herr.-Schæff. Eur. Schmett.* ii. 220, 117 ; ii. *Noct.* f. 524.

Noctua Cypriaca, *Hübner. Samml. Eur. Schmett. Noct.* pl. 46, f. 224. *Haw. Lep. Brit.* 227.

a—g. England. From Mr. Stephens' collection.

h, i. England.

j, k. Scotland. From Mr. Foxcroft's collection.

North America.

Group 1.

Like the second European group.

5. HYDRÆCIA LOREA.

Testacea ; thorax antice fusco varius ; alæ anticæ maculis costalibus fuscescentibus, fascia antice dilatata fuscescente lituras duas (exteriolem reniformem) albidas includente ; posticæ cinerascetes, testaceo ciliatæ.

Hydræcia lorea, *Guén. Noct.* i. 126, 197.

a—c. New York. Presented by E. Doubleday, Esq.

Group 2.

Like the third European group.

6. HYDRÆCIA IMMANIS.

Testacea; thorax antice fusco varius; alæ anticæ cano-subrufescentes, plaga discali lineis transversis annulisque duobus discalibus ferrugineis; linea exterior obliqua albida; posticæ testaceæ, fascia tenui fuscescente.

Hydræcia immanis, Guén. Noct. i. 128, 201.

a, b. New York. Presented by E. Doubleday, Esq.

7. HYDRÆCIA STRAMENTOSA.

Testacea; thorax antice linea transversa interrupta fuscescente; alæ anticæ maculis costalibus fuscescentibus, fascia maculis interioribus lineaque transversa exterior subcervinis.

Hydræcia stramentosa, Guén. Noct. i. 129, 202.

a. New York. Presented by E. Doubleday, Esq.

Genus 3. NEPHELODES.

Corpus robustum. Proboscis brevis. Palpi validi, pilosi, oblique ascendentes; articulus 3us minimus. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exterior subobliquo. *Mas.*—Antennæ subpectinatæ, corporis dimidio paullo breviores. Abdomen alas posticas triente superans. *Fæm.*—Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas per paullo superans.

Nephelodes, Guén. Noct. i. 129.

Body stout. Proboscis short. Palpi stout, pilose, obliquely ascending; third joint very minute. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, angular at the tips, slightly oblique along the exterior border; first, second and third inferior veins approximate at the base: fourth remote. *Male.*—Antennæ minutely pectinated, a little less than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. *Female.*—Antennæ simple, rather more than half the length of the body. Abdomen extending very little beyond the hind wings.

North America.

1. NEPHELODES MINIANS.

Rubida ; abdomen testaceum ; alæ anticæ guttis costalibus pallidioribus, plaga discali maculas duas includente saturatiore, linea transversa exteriori antice dilatata fuscescente, venis nigricantibus ; posticæ cinerascens, ciliis rufescentibus.

Nephelodes minians, Guén. Noct. i. 130, 203.

a—d. Nova Scotia. From Lieut. Redman's collection.

e. Orilla, West Canada. From Mr. Bush's collection.

f, g. ———?

2. NEPHELODES? EMMEDONIA.

Ochracea ; abdomen testaceum ; alæ anticæ fasciis tribus ferrugineis, 1a arcuata, 2a undulata, 3a lata recta ; posticæ cinereæ, testaceo latissimo marginatæ.

Phalæna-Noctua Emmedonia, Cram. Pap. Exot. iii. 92, pl. 247, f. D.

N. minians, var.?

Virginia.

3. NEPHELODES VIOLANS.

Cinereo-ferruginosa ; abdomen testaceum ; alæ anticæ plaga varia discali fasciisque indeterminatis obscurioribus ; posticæ cinerascens, ciliis rufescentibus.

Nephelodes violans, Guén. Noct. i. 130, 204.

a, b. New York. Presented by E. Doubleday, Esq.

c—e. Illinois. Presented by E. Doubleday, Esq.

Australia?

4. NEPHELODES RUBEOLANS.

Palpi breviores ; alæ anticæ rubidæ, lituris distinctioribus, macula discali orbiculata magis determinata, reniformi breviori plus rotundato ; posticæ nigricantes, ciliis carneis.

Nephelodes rubeolans, Guén. Noct. i. 130, 205.

New Holland?

Genus 4. MARTHULA.

Mas. Corpus vix robustum. Proboscis mediocriter longa. Palpi validi, pilosi, appressi, oblique ascendentes; articulus 3us minimus. Antennæ crenulatæ, corporis dimidio longiores. Abdomen alas posticas dimidio superans, fasciculo apicali angulato. Pedes graciles, vix pilosi; tibiæ posticæ calcaribus quatuor longissimis. Alæ sat angustæ; anticæ apud costam rectæ, apice rectangulatæ, margine exteriori antico non obliquo.

Male. Somewhat resembling *Nonagria*. Body hardly stout. Proboscis moderately long. Palpi stout, pilose, obliquely ascending, applied to the head; third joint extremely minute. Antennæ crenulate, rather more than half the length of the body. Abdomen extending for about half its length beyond the hind wings, with an angular fan-shaped apical tuft. Legs slender, hardly pilose; hind tibiæ with four very long spurs. Wings rather narrow. Fore wings straight in front, rectangular at the tips, not oblique along the fore half of the exterior border; three inferior veins; first and second nearly contiguous, fourth moderately remote.

1. MARTHULA QUADRATA.

Mas. *Rufo-cervina*, alæ anticæ lineis nonnullis transversis pallidioribus obliquis subundulatis, guttisque apud marginem anteriorem nigris; posticæ albidæ, marginibus fuscescentibus.

Male. Reddish fawn-colour. Fore wings with some paler oblique slightly undulating transverse lines, and with a row of black dots near the exterior border. Hind wings whitish, with brownish borders. Abdomen whitish beneath, except towards the tip. Posterior tibiæ and tarsi mostly whitish. Length of the body 8 lines; of the wings 14 lines.

a. Parà. From Mr. Bates' collection.

Subfam. 2. XYLOPHASIDES.

Xylophasides, *Guén. Noct. i.* 131.

- | | | | | |
|--------------------------|---|---|---|-------------------------------|
| A. Proboscis brevissima. | - | - | - | 1. SCOLICOCAMPA, <i>Guén.</i> |
| B. Proboscis brevis. | | | | |
| A. Corpus sat gracile. | - | - | - | 2. ACHATODES, <i>Guén.</i> |
| B. Corpus vix robustum. | - | - | - | 9. LAPHYGMA, <i>Guén.</i> |

B.B B.B

B.B B.B

C. Corpus robustum.

- A. Palpi caput sat superantes. - - 4. XYLOPHASIA, *Guén.*
- B. Palpi caput vix superantes. - - 6. XYLOMYGES, *Guén.*
- C. Palpi caput non superantes. - 11. CALOGRAMMA, *Guén.*

C. Proboscis mediocriter longa.**A. Palpi articulo 3o brevissimo.**

- A. Palpi porrecti. - - - 7. APOROPHYLLA, *Guén.*
- B. Palpi ascendentes.
 - a. Alæ anticæ sat angustæ. - - 8. SPODOPTERA, *Guén.*
 - b. Alæ anticæ sat latæ.
 - i. Alæ anticæ margine exteriori perobliquo.
 - 13. CHIRAPHA, *Walk.*
 - ii. Alæ anticæ margine exteriori sat obliquo.
 - 14. DARGIDA, *Walk.*

B. Palpi articulo 3o longi-conico aut cylindrico.**A. Palpi porrecti.**

- a. Corpus robustum. - - - 5. DIPTERYGIA, *Guén.*
- b. Corpus sat gracile. - - - 15. FELTIA, *Walk.*

B. Palpi ascendentes.

- a. Palpi articulo 3o longi-conico.
- b. Palpi articulo 3o cylindrico. - - 12. NEURIA, *Guén.*
 - i. Alæ posticæ non semihyalinæ. - 3. AXYLIA, *Hübner.*
 - ii. Alæ posticæ semihyalinæ. - 10. PRODENIA, *Guén.*

Genus 1. SCOLICOCAMPA.

Frons plana, fasciculo acuto. Proboscis brevissima. Palpi bene determinati, porrecti, compressi, validi, securiformes, pilosi, articulis 2o et 3o confusis. Antennæ *maris* pubescentes. Thorax rotundatus, lævis. Pedes valde pilosi; antici breves; postici calcaribus robustis. Alæ integræ, validæ, squamosæ, ciliis longis densis; posticæ vix tenuiores.

Scolicocampa, *Guén. Noct. i. 131.*

Front flattened, with an acute tuft. Proboscis very short. Palpi broad, securiform, pilose, porrect, much developed and compressed; third joint confused with the second. Antennæ of the male pubescent. Legs very pilose. Fore legs short. Hind tibiæ with stout spurs. Wings entire, robust, squamose, with long thick ciliæ. Hind wings hardly more delicate than the fore wings.

1. SCOLICOCAMPA LIGNI.

Palpi fusci, supra carneo strigati; pedes antici fusci; alæ anticæ subcarneo-cinereæ, velutinæ, punctis nonnullis nigris et rufescentibus, annulo orbiculato subobsoleto, reniformi nigricante bene determinato, macula guttisque exterioribus nigris, ciliis rufescentibus nigro guttatis; posticæ fuscescentes, punctis marginalibus nigris, ciliis incarnatis, subtus lunula lineaque discali nigris.

Scolicocampa ligni, Guén. Noct. i. 131, 206.

Georgia.

Genus 2. ACHATODES.

Mas. Corpus sat gracile. Proboscis brevis. Palpi porrecti, caput sat superantes; articulus 3us cylindricus, 2i quadrante non brevior. Antennæ simplices, sat validæ, corporis dimidio paullo longiores. Abdomen alas posticas paulle superans, apice fasciculatum. Pedes sat validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriori subobliquo.

Achatodes, Guén. Noct. i. 132.

Male. Body rather slender. Proboscis short. Palpi porrect, extending some distance beyond the head; third joint cylindrical, full one-fourth of the length of the second. Antennæ simple, rather stout, a little more than half the length of the body. Abdomen extending a little beyond the hind wings, tufted at the tip. Legs rather stout; hind tibiæ with four moderately long spurs. Wings rather broad. Fore wings nearly straight in front, rounded at the tips, slightly oblique along the exterior border; first, second and third inferior veins nearly contiguous at the base; fourth not remote.

1. ACHATODES SANDIX.

Ferruginosa; caput et thorax fulvo varia; alæ anticæ cinereo nebulosæ; fasciis duabus indeterminatis e guttis nigris, macula apicali testaceo-albida; posticæ pallide cinerascetes.

Achatodes sandix, Guén. Noct. i. 132, 207.

a—e. Trenton Falls, New York. Presented by E. Doubleday, Esq.
f. Florida. Presented by E. Doubleday, Esq.

Genus 3. AXYLIA.

Corpus validum. Proboscis mediocriter longa. Palpi porrecti, caput superantes; articulus 3us longi-conicus, 2i quadrante brevior. Antennæ corporis dimidio multo longiores. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriori mediocriter obliquo. *Mas.*—Antennæ subciliatæ. Abdomen cristatum, alas posticas paullo superans. *Fæm.*—Abdomen alas posticas non superans.

Xylina, p., *Ochs.*; *Treit.*; *Meig.*; *Steph.*

Agrotis, p., *Boisd.*; *Dup.*

Xylophasia, p., *Guén. Ann. Soc. Ent. Fr.* vi.

Axylia, *Hübner. Verz. Schmett.* 242. *Guén. Noct.* i. 132.

Body stout. Proboscis moderately long. Palpi porrect, extending beyond the head; third joint elongate-conical, not one-fourth of the length of the second. Antennæ much more than half the length of the body. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, slightly rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote. *Male.*—Antennæ minutely ciliated. Abdomen with dorsal crests, extending a little beyond the hind wings. *Female.*—Abdomen not extending beyond the hind wings.

Europe.

1. AXYLIA PUTRIS.

Cervino-testacea; palpi nigro varii; antennæ nigræ; thoracis dorsum cervinum, fascia nigra; alæ anticæ apud costam nigricantes, macula discali guttisque discalibus et marginalibus nigris; posticæ albidæ, gutta discali fusca, lituris marginalibus nigris.

———, *Engr. Pap. d'Eur.* 376, a—c. *Albin, Nat. Hist. Engl. Ins.* pl. 79, f. a—d. *Harr. V. M.* 35.

Phalæna-Noctua putris, *Linn. Faun. Suec.* 1187; *Syst. Nat.* ii. 850. *Gmel. ed. Syst. Nat.* i. 5, 2565, 152. *Turt. Syst. Nat.* iii. 337.

Noctua putris, *Fabr. Sp. Ins.* ii. 240, 147; *Mant. Ins.* ii. 182: *Ent. Syst.* iii. 2, 123, 370. *Esp. Schmett.* iv. pl. 138, f. 45. *Bork. Eur. Schmett.* iv. 329, 136. *Haw. Lep. Brit.* 34.

Xylina putris, Treit. Schmett. Eur. iii. 29; vi. 411. Steph. Ill. Brit. Ent. Haust. ii. 172; Cat. Brit. Lep. 83. Wood, Ind. Ent. pl. 11, f. 223. Meig. Handb. 175, 71; Syst. Besch. iii. 184, 8, pl. 110, f. 3.

Phalæna-Noctua subcorticalis, Hüfn. Berl. Mag. iii. 308.

Noctua lignosa, Hübn. Eur. Schmett. Noct. pl. 50, f. 245.

Agrotis putris, Dup. Hist. Nat. Lép. Fr. vii. 168, pl. 3, f. 1. Boisd. Ind Méth. iii. 853.

a—h. England. From Mr. Stephens' collection.

i—l. England.

m—s. Europe. From M. Becker's collection.

Africa.

2. AXYLIA CORRUPTA.

Caput ferrugineo-flavescens; thorax nigro-cinereus, antice ferrugineo-flavescens; abdomen flavescens-cinereum; alæ anticæ fusco-cinereæ, lineis maculisque obscurioribus, apud marginem anteriorem ochraceo-flavescentes macula ferrugineo-fusca, ciliis ochraceis fusco notatis; posticæ cinerascens.

Axylia corrupta, Guén. Noct. i. 133, 208.

Senegal.

3. AXYLIA PUTREFACTA.

Pectus et pedes postici rufescente varia; alæ anticæ oblongæ, integræ, fusco-ochraceæ, conspersæ, margine lineoque discali violaceo-fuscis, maculis obscure fuscis; posticæ semihyalinæ, subiridescentes, margine anteriore lunulato obscuriore.

Axylia putrefacta, Guén. Noct. i. 134, 210.

Abyssinia.

4. AXYLIA TABIDA.

Nigricans; alæ anticæ ochraceo-flavescentes, carneo suffusæ, margine rufescente-cinereo, annulo reniformi distincto cinereo nigro-lineolato, lineis exterioribus et ciliaribus fuscescentibus; posticæ albæ, apud marginem fuscescentes.

Axylia tabida, Guén. Noct. i. 135, 212.

Senegal.

5. AXYLIA PLECTILIS.

Alæ anticæ fuscae, sublucentes, vitta lata nigricante, radiis exterioribus fulvo-fuscis, ciliis albo notatis, annulo orbiculari rotundo minimo nigro-lineolato, reniformi majore margine pallidiore; posticæ albæ, ciliis nigro tinctis.

Axylia plectilis, Guén. Noct. i. 135, 213.

Sierra Leone.

Country unknown.

6. AXYLIA SICCA.

Pallide flava, parva; alæ anticæ cervino-testaceæ, apud costam nigricantes, macula discali guttisque discalibus et marginalibus nigris; posticæ albæ, subhyalinæ.

Axylia sicca, Guén. Noct. i. 135, 211.

Genus 4. XYLOPHASIA.

Corpus robustum. Caput antice subfasciculatum. Proboscis brevis. Palpi porrecti, caput sat superantes; articulus 3us cylindricus, 2i quadrante longior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas plus minusve superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocres; anticæ strigatæ, lignicolores, apud costam rectæ, apice rotundatæ, margine exteriori subobliquo. *Mas.*—Abdomen apice fasciculatum.

Xylophasia, Steph. Ill. Brit. Ent. Haust. ii. 174 Herr.-Schæff. Guénée, Ann. Soc. Ent. Fr. vi. 356; Noct. i. 135.

Xylina, Ochs.; Treits.

Septis, Lithophane et *Parastichtis*, Hübn. Verz. Schmett. 243.

Hadena, *Luperina* et *Asteroscopus*, Boisd.

Nonagria, p., Frey.

Xylophasia et *Egira*, Dup.

Body stout. Head slightly tufted in front. Proboscis short. Palpi porrect, extending some distance beyond the head; third joint cylindrical, more than one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Abdomen extending for one-fourth or one-third of its length beyond the hind wings. Legs moderately stout; hind tibiæ with four long spurs.

Wings moderately long and broad. Fore wings streaked generally with testaceous and brown, and having the appearance of dead wood, straight in front, rounded at the tips, slightly oblique along the exterior border. *Male*.—Abdomen tufted at the tip.

1. XYLOPHASIA ZOLLIKOFFERI.

Fusco-cinerea; *alæ anticæ stigmatibus obsoletis, linea undulata denticulata, venis in areola 3a nigro punctatis.*

Nonagria Zollikofferi, *Frey. Neu. Beit. Schmett.* ii. 145, pl. 184, f. 1, 2. *Eversm. Faun. Volg-Ural.* 271.

Luperina Zollikofferi, *Boisd. Ind. Méth.* 114, 878. *Guén. Ann. Soc. Ent. Fr.* vi. 239; *Noct.* i. 137, 214.

Xylophasia Zollikofferi, *Dup. Hist. Nat. Lép. Fr. Supp.* iv. 209, pl. 68. *Herr.-Schæff. Eur. Schmett.* ii. 287, 327; ii. *Noct.* pl. 21, f. 103, 104.

Sarepta.

2. XYLOPHASIA LATERITIA.

Ferruginea; *abdomen testaceum*; *alæ anticæ annulis discalibus albidis, guttis exterioribus et marginalibus nigricantibus*; *posticæ cinereæ, ciliis testaceis.*

Noctua lateritia, *Naturf.* ix. 127. *Esp. Schmett.* pl. 131. *Bork. Eur. Schmett.* 188. *Frey. Neu. Beit. Schmett.* i. pl. 65.

Septis lateritia, *Hübner. Verz. Schmett.* 243, 2421.

Xylina lateritia, *Treit. Schmett. Eur.* iii. 45.

Luperina lateritia, *Boisd. Ind. Méth.* 114, 879.

Xylophasia lateritia, *Dup. Hist. Nat. Lép. Fr.* iv. 208, pl. 113, f. 5. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 137, 215.

Noctua molochina, *Hübner. Samml. Eur. Schmett.* 741.

a, b. Europe. From M. Becker's collection.

c. Nova Scotia. From Lieut. Redman's collection.

d. Newfoundland.

3. XYLOPHASIA RUREA.

Testacea; *thorax fuscus, ex parte testaceus*; *alæ anticæ plagis duabus submarginalibus externis una subcostali unaque postica basali fuscis, strigis costalibus fuscis guttisque exterioribus costalibus pallidis, guttis nonnullis oblongis discalibus nigricantibus*; *posticæ litura discali, fascia tenui margineque lato cinereis.*

Var. *Alæ anticæ rufo-fuscæ, annulis duobus discalibus testaceis.*

- Noctua rurea, *Fabr. Sp. Ins.* ii. 240, 148; *Mant. Ins.* ii. 184, 307; *Ent. Syst.* iii. 2, 125, 378. *Bork. Eur. Schmett.* iv. 331, 137. *Freyer, Alt. Beitr.* pl. 4, f. 2; *Ent. Zeit. Stett.* ii. 107.
- Septis rurea, *Hübner. Verz. Schmett.* 243, 2418.
- Xylina rurea, *Treit. Schmett. Eur.* v. 3, 35, 14. *Meig. Handb.* 175, 71; *Syst. Besch.* iii. 185, pl. 110, f. 7.
- Noctua putris, *Wien. Verz.* 75, 4. *Hübner. Schmett. Eur. Noct.* pl. 50, f. 241.
- Noctua combusta, *Hübner. Schmett. Eur. Noct.* pl. 79, f. 366.
- Noctua Alopecurus, *Esp. Schmett.* iv. pl. 147, f. 3.
- Noctua luculenta, *Esp. Schmett.* iv. pl. 133, f. 3, 4.
- Phalæna (Noctua) rurea, *Gmel. ed. Syst. Nat.* i. 5. 2567, 1145.
- Luperina rurea, *Boisd. Ind. Méth.* 114, 880.
- Xylophasia rurea, *Steph. Ill. Brit. Ent. Haust.* ii. 176; *Cat. Brit. Lep.* 85. *Dup. Hist. Nat. Lép. Fr.* vii. 197, pl. 113, f. 2. *Westw. & Humph. Brit. Moths*, i. 159, pl. 32, f. 4. *Herr.-Schæff. Eur. Schmett.* ii. 288, 332. *Guén. Noct.* i. 137, 217.
- Xylophasia combusta, *Steph. Ill. Brit. Ent. Haust.* ii. 177. *Westw. & H. Brit. Moths*, i. 159, pl. 32, f. 5.
- Xylina borealis, *Curt. Brit. Ent.* vi. 256.

Var. *Alæ anticæ rubido-fuscæ, lineis nigris obsoletis, macula orbiculari oblonga fusca nigro-cincta, fusca albo-cincta, fimbria fusca; posticæ fusco-cinereæ, fimbria cinerea.*

- Apamea aquila, *Donzel, Ann. Soc. Ent. Fr.* vi. 476, 6, pl. 18, f. 6.
- Xylophasia aquila, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 448, pl. 39. *Herr.-Schæff. Eur. Schmett.* ii. 498. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 138, 218.

a—q. England. From Mr. Stephens' collection.

r—x. England.

y—bb. Europe. From M. Becker's collection.

cc. Trenton Falls, New York. Presented by E. Doubleday, Esq.

4. XYLOPHASIA LITHOXYLEA.

Albida; corpus vitta dorsali testacea; alæ anticæ testaceo diffuse vittatæ, strigis duabus discalibus nonnullisque costalibus et marginalibus fuscescentibus, fascia obliqua e guttis duplicatis nigricantibus; posticæ margine subtestacea, guttis marginalibus fuscescentibus.

———, *Engr. Pap. d' Eur.* 379.

Phalæna-Noctua lithoxylea, *Gmel. ed. Syst. Nat.* i. 5, 2565, 1134.

Noctua lithoxylea? *Wien. Verz.* 75, 2. *Fabr. Mant. Ins.* ii. 182, 299; *Ent. Syst.* iii. 2, 125, 378. *Haw. Lep. Brit.* 25. *Borkh. Schmett.* iv. 324, 134.

Noctua sublustris, *Esp. Schmett.* iv. pl. 133, f. 2.

Noctua musicalis? *Esp. Schmett.* iv. pl. 147, f. 5.

Xylina lithoxylea, *Treit. Schmett. Eur.* iii. 47; vi. 412. *Meig. Syst. Besch.* iii. 185, 9, pl. 110, f. 2.

Xylophasia lithoxylea, *Steph. Ill. Brit. Ent. Haust.* ii. 175. *Dup. Hist. Nat. Léop. Fr.* vii. 175, pl. 3, f. 5. *Cat. Brit. Lep.* 84. *Boisd. Ind. Méth.* 115, 885. *Guén. Noct.* i. 139, 219. *Westw. & H. Brit. Moths*, i. 158, pl. 32, f. 1.

Xylophasia polyodon, *var.*, *Boisd. Ind. Méth.* ed. 1.

Xylophasia sublustris, *Herr.-Schæff. Eur. Schmett.* ii. 288, 331.

a—c. England. Presented by E. Doubleday, Esq.

d—k. England. From Mr. Stephens' collection.

l—n. England.

o—q. Europe. From M. Becker's collection.

5. XYLOPHASIA SUBLUSTRIS.

Pallide cervina; alæ anticæ fascia margineque exteriori ex parte fuscescentibus, lituris discalibus fasciaque exteriori pallidioribus; posticæ cervino-cinereis, fascia pallidiori et obscuriore.

———, *Engr. Pap. d'Eur.* 378, b.

Noctua sublustris, *Esp. Schmett.* iv. pl. 133, f. 1.

Noctua lithoxylea, *Hübner. Samml. Eur. Schmett. Noct.* pl. 49, f. 240.

Septis lithoxylea, *Hübner. Verz. Schmett.* 243, 2416.

Xylophasia sublustris, *Steph. Ill. Brit. Haust.* ii. 175. *Guén. Noct.* i. 139, 220.

Xylophasia musicalis, *Dup. Hist. Nat. Léop. Fr.* iv. 177, pl. 113, f. 1.

Xylophasia lithoxylea, *var.*, *Boisd. Ind. Méth.*, 115, 885.

Xylophasia lithoxylea, *Herr.-Schæff. Eur. Schmett.* ii. 288, 330.

a. England. Presented by J. C. Dale, Esq.

b, c. England. From Mr. Carter's collection.

d—j. England. From Mr. Stephens' collection.

6. XYLOPHASIA PULLA.

Cinerea; thorax fasciis nigricantibus et albidis; alæ anticæ obscure cinereæ, disco exteriori pallidiori, lituris duabus discalibus elongatis albido marginatis; posticæ albæ, venis exterioribus fuscis.

Noctua pulla, *Wien. Verz.* 8. *Hübner. Samml. Eur. Schmett.* 138, 692.

Xylophasia pulla, *Dup. Hist. Nat. Lép. Fr.* iv. 226, pl. 114. *Guén. Noct.* i. 142, 228.

Noctua Felixii, *Frey. Neu. Beit. Schmett.* iv. pl. 311.

Xylina pulla, *Treit. Schmett. Eur.* iii. 51. *Herr.-Schæff. Eur. Schmett.* ii. 304, 376. *Steph. Ill. Brit. Ent. Haust.* ii. 170; *Cat. Brit. Lep.* 82. *Westw. & H. Brit. Moths*, i. 154, pl. 31, f. 2.

Lithophane pulla, *Hübner. Verz. Schmett.* 242, 2410.

Asteroscopus pulla, *Boisd. Ind. Méth.* 85, 662.

Egira pulla, *Dup. Cat.* 162.

South France. Austria. Hungary.

a. England. (Epping Forest).

7. XYLOPHASIA PETRORHIZA.

Cana; thorax vittis duabus obliquis nigris; alæ anticæ lineis variis obscurioribus, vitta late interrupta, litura discali strigisque exterioribus nigris; posticæ albæ, fuscescente marginatæ.

Var. *Alæ anticæ cinereæ, posticæ canæ, fusco marginatæ.*

———, *Engr. Pap. d'Eur.* 283, a—c.

Noctua petrorhiza, *Bork. Eur. Schmett.* iv. 343, 809, 143. *Frey. Beit. Ges. Eur. Schmett.* pl. 113.

Xylina petrorhiza, *Treit. Schmett. Eur.* v. 3, 49, 19; *Suppl.* x. 117. *Meig. Syst. Besch.* iii. 189, 17, pl. 112, f. 10.

Xylophasia petrorhiza, *Dup. Hist. Nat. Lép. Fr.* iv. 223, pl. 114. *Herr.-Schæff. Eur. Schmett.* ii. 288, 333. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 143, 229.

Noctua comma, *Wien. Verz.* 76, 9. *Hübner. Schmett. Eur. Noct.* pl. 52, f. 251.

Noctua Tanaceti, *Esp. Schmett.* iv. pl. 116, f. 7.

Hadena petrorhiza, *Boisd. Ind. Méth.* 118, 921.

a—c. Europe. From M. Becker's collection.

8. XYLOPHASIA POLYODON.

Fuscescens; thorax nigro albidoque varius; abdomen subtestaceum; alæ anticæ lineolis, denticulis exterioribus annulisque duobus discalibus pallidioribus nigrisque, fasciis duabus vix conspicuis pallidioribus, posticæ pallidissime cinereæ, litura discali margineque cinereo-fuscis, ciliis albidis.

- , *Engr. Pap. d'Eur.* 245, a, b; 380, c—e.
- Phalæna-Noctua polyodon, *Linn. Syst. Nat.* ii. 853, 170; *Faun. Suec.* 1219. *Gmel. ed. Syst. Nat.* i. 5, 2571, 170.
- Noctua polyodon, *Bork. Eur. Schmett.* 109. *Haw. Lep. Brit.* 73.
- Noctua radicea, *Wien. Verz.* 81, 15. *Bork. Eur. Schmett.* 570, 235. *Hübner. Samml. Eur. Schmett.* pl. 17, f. 82. *Fabr. Sp. Ins.* ii. 237, 136; *Mant. Ins.* ii. 178, 276; *Ent. Syst.* iii. 2, 124, 306.
- Septis polyodon, *Hübner. Verz. Schmett.* 243, 2417.
- Xylina polyodon, *Treit. Schmett.* v. 3, 41, 16.
- Noctua occulta et monoglypha, *Esp. Schmett.* iv. *Text*, pl. 132, f. 3, 4.
- Noctua monoglypha, *Knoch, Beitr.* iii. pl. 5, f. 3—6.
- Noctua (Mamestria) polyodon, *Meig. Syst. Besch.* iii. 141, 107, pl. 104, f. 7.
- Xylophasia polyodon, *Steph. Ill. Brit. Ent. Haust.* ii. 176. *Dup. Hist. Nat. Léop. Fr.* vii. pl. 111, f. 4. *Guén. Noct.* i. 144, 230. *Westw. & H. Brit. Moths*, i. 158, pl. 32, f. 3.
- Luperina polyodon, *Boisd. Ind. Méth.* 115, 886.
- Hadena polyodon, *Herr.-Schæff. Eur. Schmett.* ii. 279, 298.
- a—n. England. From Mr. Stephens' collection.
- o—s. England.
- t. Scotland. From Mr. Foxcroft's collection.
- v, u. Europe. From M. Becker's collection.
- w, x. France.

9. XYLOPHASIA HEPATICA.

Subtestacea; thorax nigro varius; alæ anticæ fuscescente subnebulosæ, guttis costalibus exterioribus albicantibus, annulis duobus discalibus, strigis guttisque nonnullis nigris, linea transversa angulata submarginali pallida; posticæ pallide subcinereæ, litura discali margineque lato cinereo-fuscis.

- , *Engr. Pap. d'Eur.* 375, b.
- Phalæna-Noctua hepatica, *Linn. Syst. Nat.* ii. 853, 169; *Faun. Suec.* 1209. *Clerck, Icon.* pl. 8, f. 3. *Gmel. ed. Syst. Nat.* i. 5, 2571, 169.
- Noctua hepatica, *Wien. Verz.* 83, 16. *Fabr. Sp. Ins.* ii. 237, 134; *Mant. Ins.* ii. 177, 271; *Ent. Syst.* iii. 2, 337. *Bork. Eur. Schmett.* 189. *Frey. Beit.* iv. pl. 310.
- Noctua caracterea, *Hübner. Samml. Eur. Schmett. Noct.* 638, pl. 28, f. 133, 638.
- Noctua implexa, *Hübner. Eur. Schmett. Noct.* f. 414.
- Parastichtis hepatica, *Hübner. Verz. Schmett.* 213, 2120.

- Noctua epomidion, *Haw. Lep. Brit.* 170.
 Xylophasia epomidion, *Steph. Ill. Brit. Ent. Haust.* ii. 178.
 Xylophasia caracterea, *Westw. & H. Brit. Moths*, i. 140, pl. 32, f. 6, 7.
 Xylina hepatica, *Treit. Schmett.* iii. 39.
 Xylophasia hepatica, *Dup. Hist. Nat. Lép. Fr.* vii. 204, pl. 113.
Guén. Noct. i. 144, 231. *Herr.-Schæff. Eur. Schmett.* ii. 287, 329.
 Luperina hepatica, *Boisd. Ind. Méth.* 114, 884.
a, b. England. Presented by E. W. Duck, Esq.
c—e. England. Presented by E. Doubleday, Esq.
f—n. England. From Mr. Stephens' collection.
o, p. England. From Mr. Stevens' collection.
q, r. Europe. From M. Becker's collection.

10 XYLOPHASIA SCOLOPACINA.

- Pallide cervina, cristis dorsalibus nigricantibus; alæ anticæ guttis, plaga subcostali, macula postica basim versus, strigulis lanceolatis punctisque submarginalibus nigricantibus, fasciis duabus diffusis subinterruptis fuscis, plaga discali albida; posticæ cinereæ.*
 ———, *Engr. Pap. d' Eur.* 377, a—c.
 Noctua scolopacina, *Esp. Schmett.* iv. pl. 130, f. 1. *Hübner. Samml. Eur. Schmett. Noct.* f. 460. *Frey. Neu. Beit. Schmett.* i. 121, pl. 64. *Ent. Zeit. Stett.* ii. 107.
 Xylina scolopacina, *Treit. Schmett. Eur.* iii. 33; vi. 411; *Suppl.* x. 114.
 Xylophasia scolopacina, *Dup. Hist. Nat. Lép. Fr.* iv. 201, pl. 113.
Steph. Ill. Brit. Ent. Haust. ii. 178; *Cat. Brit. Lep.* 85.
Westw. & H. Brit. Moths, i. 160, pl. 32, f. 8. *Guén. Noct.* i. 145, 233. *Herr.-Schæff. Eur. Schmett.* ii. 287, 328.
 Noctua abbreviata, *Haw. Lep. Brit.* 28, 170.
 Luperina Scolopacina, *Boisd. Ind. Méth.* 114, 881.
a—c. England. From Mr. Carter's collection.
d—g. England. From Mr. Stephens' collection.
h. England.
i—m. Europe. From M. Becker's collection.

North America.

A. Alæ anticæ non cinerascentes.

A. Statura sat magna.

A. Alæ anticæ obscuræ. - - - apamiformis, Guén.

B. Alæ anticæ pallidiores.

a. Alæ anticæ nigro non vittatæ. - lignicolora, Guén.

b. Alæ anticæ nigro vittatæ.

i. Alæ anticæ vittis duabus nigris. - verbascoides, Guén.

ii. Alæ anticæ vitta una nigra.

* Thorax nigro non vittatus. - indocilis, Walk.

** Thorax nigro vittatus. - - - infixa, Walk.

B. Statura minor. - - - sectilis, Guén.

B. Alæ anticæ cinerascentes.

A. Statura sat magna.

A. Alæ anticæ bivittatæ. - - - - - cariosa, Guén.

B. Alæ anticæ non vittatæ. - - - libera, Walk.

B. Statura minor. - - - - - mucens, Hübn.

11. XYLOPHASIA APAMIFORMIS.

Ferrugineo-fusca ; abdomen cinereo-fuscescens ; alæ anticæ strigis plagis marginalibus, maculis punctisque nigricantibus, annulo reniformi ex parte testaceo ; posticæ cinereæ.

Xylophasia apamiformis, Guén. Noct. i. 137, 216.

a. New York. Presented by E. Doubleday, Esq.

b. Philadelphia. Presented by E. Doubleday, Esq.

12. XYLOPHASIA LIGNICOLORA.

Testacea, lignicolora ; abdomen pallidum ; alæ anticæ plus minusve strigatæ, plagis aut strigis discalibus et marginalibus fuscis, annulis discalibus indistinctis ; posticæ albidæ aut cinerascentes, marginibus obscurioribus.

Xylophasia lignicolora, Guén. Noct. i. 140, 221.

a—g. Trenton Falls, New York. Presented by E. Doubleday, Esq.

h—o. Nova Scotia. From Lieut. Redman's collection.

13. XYLOPHASIA VERBASCOIDES.

Subcervina; thorax vittis duabus ferrugineis nigro marginatis; abdomen pallidum; alæ anticæ punctis vittisque duabus (antica incompleta) nigris, lineolis duabus albidis, una apud areolæ discalis apicem, altera posteriore; posticæ cinerascens, margine lato obscuriore.

Xylophasia Verbascoides, Guén. Noct. i. 141, 224.

a—d. New York. Presented by E. Doubleday, Esq.

e. Orilla, West Canada. From Mr. Bush's collection.

14. XYLOPHASIA SECTILIS.

Subcervina; thorax vittis duabus obliquis nigricantibus; alæ anticæ lituris costalibus discalibus et marginalibus strigisque apud angulum interiorem nigro-fuscis; posticæ cinereæ, margine obscuriore.

Var. *Alæ anticæ vitta diffusa nigro-fusca.*

Xylophasia sectilis, Guén. Noct. i. 141, 225.

a. United States. Presented by E. Doubleday, Esq.

15. XYLOPHASIA MUCENS.

Pallide lignicolora; alæ anticæ lineolatæ, lituris costalibus, macula discali plagisque marginalibus fuscis; posticæ subcinereæ, marginibus fuscis.

Septis mucens (Noctua genuina, *Xylæna communiformis*), Hübn. Samml. Eur. Schmett. iii. 9, 208, f. 415, 416; Verz. Schmett. 243, 2419.

Xylophasia mucens, Guén. Noct. i. 142, 226.

Pennsylvania.

a. Florida. Presented by E. Doubleday, Esq.

16. XYLOPHASIA CONFUSA.

Mas. *Obscure fusca; abdomen cinereum; alæ anticæ ocellis duobus discalibus strigisque angulosis submarginalibus pallide subvirescentibus; posticæ cinereæ.*

Auchmis confusa (*Noctua genuina*, *Xylæna communiformis*), *Hübner*.
Samml. Exot. Schmett. iii. 25, 248; v. 495, 496; *Verz.*
Schmett. 243, 2423.

Xylophasia confusa, *Guén. Noct.* i. 142, 227.

Pennsylvania. Carolina.

17. XYLOPHASIA CARIOSA.

Fusco-cinerea; *thorax nigro bivittatus*; *alæ anticæ annulis duobus discalibus pallidioribus, lituris costalibus, vittis posticis strigisque marginalibus nigris*; *posticæ ciliis pallidis*.

Xylophasia cariosa, *Guén. Noct.* i. 144, 232.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

18. XYLOPHASIA INFIXA.

Subcervina; *caput et thoracis fascia fuscescentia*; *alæ anticæ punctis costalibus, vitta discali striga posteriore strigisque exterioribus nigris*; *posticæ pallide cinereæ, marginibus latis fuscescentibus*.

Pale dead wood-colour. Head and band of the thorax brownish. Fore wings with some black costal speckles, with a posterior streak of black speckles, with a black stripe traversing the discal ringlets, and with exterior black streaks. Hind wings pale cinereous, with broad brownish borders. Length of the body 5 lines; of the wings 12 lines.

a. Florida. Presented by E. Doubleday, Esq.

19. XYLOPHASIA INDOCILIS.

Fusco-testacea; *thorax nigro bivittatus*; *alæ anticæ lituris costalibus et basalibus, strigis duabus marginalibus unaque discali angulata ferrugineis nigro variis, lunulis marginalibus atris*; *posticæ cinereæ, lineis duabus transversis marginibusque latissimis fuscescentibus*.

Brownish testaceous. Thorax with a black stripe on each side. Fore wings with ferruginous black-varied marks along the costa and towards the base, with a large angular one which extends between and behind the discal ringlets, and with two on the exterior border, which is adorned with a row of deep black lunules; the large spot forms a right angle hindward, and is bounded on the in-

terior side by a double transverse undulating line; hind wings pale cinereous, with two transverse lines and very broad borders of a brownish hue. Length of the body 5—6 lines; of the wings 12 lines.

a—e. New York. Presented by E. Doubleday, Esq.

f. Massachusetts. From Prof. Sheppard's collection.

20. XYLOPHASIA LIBERA.

Testaceo-cana; thorax fascia vittisque duabus nigris; alæ anticæ disco et margine exteriori ex parte fuscis nigro strigatis, strigis duabus lunulisque marginalibus liturisque costalibus nigris, annulis discalibus nigro marginatis; posticæ cinereæ, ciliis pallidis.

Xylophasia cariosa?

Male. Testaceous hoary. Thorax with a black band in front, and with a black stripe on each side. Fore wings partly brown and streaked with black in the disk and along the exterior border, in the middle of which there are two lanceolate streaks; a row of blackish marks along the costa; discal ringlets with black borders; exterior border with black lunules. Hind wings cinereous, with pale ciliæ. Length of the body 5—6 lines; of the wings 14 lines.

a. New York. Presented by E. Doubleday, Esq.

South America.

21. XYLOPHASIA DENTERNA.

Femora postica basi fasciculo longo lanuginoso rufo aut ochraceo; alæ anticæ pallide ochraceæ, denticulis acutissimis, angulo margineque interioribus, ciliis et denticulo antico fuscis, striga ochracea, macula reniformi quadrata apud medium angustata nebulis olivaceis marginata, litura marginali rufescente; posticæ nigro conspersæ, subiridescentes.

Xylophasia denterna, Guén. Noct. i. 140, 222.

Brazil. Colombia.

Resembles *Cucullia Lychnitis*.

22. XYLOPHASIA DIMINUTA.

Mas. X. denternæ *simillima*, minor; abdomen omnino ochraceum; alæ anticæ denticulis brevioribus, angulo interno minus conspicuo striga ochracea duplicata diviso, litura marginali nigricante longiore maculam reniformem attingente.

Xylophasia diminuta, Guén. Noct. i. 141, 223.

Brazil.

Genus 5. DIPTERYGIA.

Corpus validum. Proboscis mediocriter longa. Palpi porrecti, longiusculi; articulus 3us cylindricus, 2i triente non brevior. Antennæ simplices, corporis dimidio longiores. Abdomen cristatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcariibus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriori subobliquo.

Calliergis, p., Hübn. Verz. Schmett. 244.

Xylina, p., Treit.; Dup.; Meig.

Cloantha, Guén. Ann. Soc. Ent. Fr.

Luperina, p., Boisd.

Dipterygia, Steph.; Guén. Noct. i. 145.

Body stout. Proboscis moderately long. Palpi porrect, longer than in most genera of the first group; third joint cylindrical, about one-third of the length of the second. Antennæ simple, more than half the length of the body. Abdomen crested, extending for full one-fourth of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, somewhat rounded at the tips, slightly oblique along the exterior border; second inferior vein at some distance from the first, contiguous to the third; fourth moderately remote from the third.

1. DIPTERYGIA PINASTRI.

Picea; thoracis discus posticus et abdomen testacea; alæ anticæ annulis discalibus strigis lanceolatis interioribus lineisque exterioribus nigris, fascia postica marginali fusco varia intus undulata nigro marginata apicem versus dilatata testacea; posticæ subcinereæ, margine lato obscuriore.

———, Engr. Pap. d'Eur. 458, c—e.

Phalæna-Noctua Pinastri, Linn. Syst. Nat. 160; Faun. Suec. 1188.

Gmel. ed. Syst. Nat. i. 5, 2568, 160.

Noctua Pinastri, *Wien. Verz.* 82, 1. *Fabr. Mant. Ins.* ii. 171. 243; *Ent. Syst.* iii. 2, 101, 302. *Knoch, Beitr. Ins.* iii. 78, pl. 4, f. 1—3. *Esp. Schmett.* iv. pl. 107, f. 4. *Donov. Nat. Hist. Brit. Ins.* pl. 347. *Bork. Eur. Schmett.* iv. 394, 160. *Hübner. Samml. Eur. Schmett. Noct.* pl. 51, f. 246. *Haw. Lep. Brit.* 33.

Xylina Pinastri, *Treit. Schmett.* v. 3, 58, 23. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 110, f. 5. *Meig. Handb.* 176, 75; *Syst. Besch.* iii. 187, 13, pl. 110, f. 11.

Dipterygia Pinastri, *Steph. Ill. Brit. Ent. Haust.* ii. 168. *Guén. Noct.* i. 146, 234. *Herr.-Schæff. Eur. Schmett.* ii. 300, 366.

Luperina Pinastri, *Boisd. Ind. Méth.* 114, 883.

Cloantha Pinastri, *Guén. Ann. Soc. Ent. Fr.* viii. 509.

Calliergis Pinastri, *Hübner. Verz. Schmett.* 244, 2429.

a—g. England. From Mr. Stephens' collection.

h—k. England.

l—o. Europe. From M. Becker's collection.

Genus 6. XYLOMYGES.

Corpus robustum. Proboscis brevis. Palpi breves, porrecti, caput vix superantes; articulus 3us minimus. Antennæ corporis dimidio paullo longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ longiusculæ, sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori perobliquo. *Mas.*—Antennæ subciliatæ.

Xylina, p., *Treit.*; *Meig.*; *Steph.*

Egira, p., *Dup.*

Luperina, p., *Boisd.*

Xylomyges, *Guén. Noct.* i. 147.

Cloantha, *Guén. Ind.*

Lithophane, p., *Hübner. Verz. Schmett.* 242.

Calliergis, *Hübner. Verz. Schmett.* 244.

Body stout. Proboscis short. Palpi short, porrect, hardly extending beyond the head; third joint very minute. Antennæ a little more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings rather long and narrow. Fore wings straight in front, rounded at the tips, very oblique along the exterior border; second inferior vein contiguous to the third, near the first; fourth moderately remote from the third. *Male.*—Antennæ minutely ciliated.

1. XYLOMYGES CONSPICILLARIS.

Canæ ; caput et thorax tenuiter nigro fasciata ; abdomen fuscescens ; alæ anticæ fuscae, apud discum nigricantes, margine interno strigisque nonnullis discalibus et exterioribus albidis, annulis discalibus venisque ex maxima parte nigris.

Var. *Alæ anticæ pallide lignicolores, nigro substrigatæ, vitta repanda subobliqua canescente.*

———, *Engr. Pap. d'Eur.* 383, a—d.

Phalæna-Noctua conspicillaris, *Linn. Faun. Suec.* i. 183. *Gmel. ed. Syst. Nat.* i. 5, 2564, 149.

Noctua conspicillaris, *Wien. Verz.* 75, 5. *Esp. Schmett.* pl. 134, f. 4, 6. *Bork. Eur. Schmett.* 138. *Hübner. Samml. Exot. Schmett. Noct.* pl. 49, f. 236, 237. *Haw. Lep. Brit.* 171.

Xylina conspicillaris, *Treit. Schmett. Eur.* iii. 27. *Meig. Handb.* 174, 69; *Syst. Besch.* iii. 189, 16, pl. 104, f. 12, 13. *Steph. Ill. Brit. Haust.* ii. 169. *Westw. & H. Brit. Moths*, i. 154, pl. 31, f. 1. *Herr.-Schæff. Eur. Schmett.* ii. 303, 371.

Lithophane conspicillaris, *Hübner. Verz. Schmett.* 242, 2409.

Egira conspicillaris, *Dup. Hist. Nat. Lep. Fr.* vii. 149, pl. 110, f. 3, 6.

Egira melaleuca, *Dup. Hist. Nat. Léop. Fr.* vii. pl. 112, f. 6.

Luperina conspicillaris, *Boisd. Ind. Meth.* 115. 887. *Bellier, de la Chavignerie Ann. Soc. Ent. Fr.* 2me Sér. v. *Bull.* xxxiv.

Cloantha conspicillaris, *Guén. Ind.*

Xylomyges conspicillaris, *Guén. Noct.* i. 149, 239.

a—c. England. From Mr. Stephens' collection.

d—f. England.

g, h. Europe. From M. Becker's collection.

i, j. Europe.

North America.

2. XYLOMYGES ? ERIDANIA.

Cervina ; alæ anticæ strigis posterioribus guttisque ciliaribus albis, maculis duabus discalibus fuscis, vittis duabus exterioribus nigris ; posticæ albæ, opalinæ.

Phalæna-Noctua Eridania, *Cram. Pap. Exot.* iv. 133, pl. 358, f. F.

Callierges Eridania, *Hübner. Verz. Schmett.* 244, 2430.

Xylomyges Eridania, *Guén. Noct.* i. 148, 235.

Surinam.

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Var. β . *Alæ anticæ non vittatæ.*

Phalæna Phytolacæ, Abbot & Smith, *Nat. Hist. Lep. Ins. Georgia*, ii. 193, pl. 97.

Phalæna-Noctua Eridania, Cram. *Pap. Exot.* iv. 13, pl. 358, f. E.

West Indies.

3. XYLOMYGES? SUNIA.

Cinerea; caput sat magnum, fronte nigra; antennæ nudæ; abdomen subtus album; alæ anticæ lituris indeterminatis, lineis vix ullis, strigulis marginalibus subarcuatis fere contiguis nigris, ciliis incisuris albis, macula reniformi vix conspicua, orbiculari alba punctiformi; posticæ iridescentes, venarum apicibus margineque angusto nigricantibus.

Xylomyges Sunia, Guén. *Noct.* i. 149, 238.

Isle St. Thomas.

South America.

4. XYLOMYGES? PUTRIDA.

X. *Eridania*, var. *Phytolacæ simillima*, minor; palpi breviores, tenuiores, minus ascendentes; alæ anticæ breviores, plus quadratæ, apice minus acutæ, macula reniformi punctum duplicatum fingente; posticæ plus iridescentes.

Xylomyges putrida, Guén. *Noct.* i. 148, 236.

Guadeloupe.

5. XYLOMYGES? AMYGIA.

Iridescente-cinerascens, X. *Eridania simillima*; facies alba; palpi recti; abdomen pilis cinereo-nigris vestitum; alæ anticæ lituris crebrioribus; posticæ venis omnibus apice nigricantibus.

Xylomyges Amygia, Gnén. *Noct.* i. 149, 237.

Brazil.

Genus 7. APOROPHYLLA.

Corpus validum. Proboscis mediocriter longa. Palpi breves, porrecti, caput non superantes; articulus 3us minimus. Antennæ simplices, corporis dimidio multo longiores. Abdomen alas posticas perpaullo superans. Pedes sat graciles; tibiæ posticæ calcaribus

quatuor longis. Alæ sat angustæ ; anticæ apud costam rectæ, apice rotundatæ, margine interiore subdenticulato mediocriter obliquo.

Aporophylla, *Guén. Ann. Soc. Ent. Fr.* x. ; *Noct.* i. 151.

Xylina, p., *Boisd.*

Agrotis, p., *Curt.*

Egira, p., *Dup.*

Body stout. Proboscis moderately long. Palpi short, porrect, not extending beyond the head ; third joint very minute. Antennæ simple, much more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs rather slender ; hind tibiæ with four long spurs. Wings rather narrow. Fore wings straight in front, rounded at the tips, moderately oblique, indistinctly convex and slightly denticulate along the exterior border ; first, second and third inferior veins approximate at the base ; fourth remote.

1. APOROPHYLA AUSTRALIS.

Cinerea ; thorax disco obscuriore, linea transversa antica nigra ; abdomen albicans ; alæ anticæ subcervino variæ, lineolis, strigulis lanceolatis exterioribus lunulisque marginalibus nigris ; posticæ canescentes, linea margineque cinerascentibus.

Hadena australis, *Boisd. Ind. Méth.* 118, 920.

Xylina australis, *Ramb. Ann. Soc. Ent. Fr.* i. 291, pl. 9, f. 8.

Guén. Ann. Soc. Ent. Fr. vi. 246. *Frey. Neu. Beit. Schmett.* iii. 412, pl. 209, f. 4.

Xylina australis, *Herr.-Schæff. Eur. Schmett.* ii. 304, 377 ; ii. *Noct.* pl. 32, f. 159, 160.

Agrotis pascuea, *Curt. Brit. Ent.* iii. 165. *Westw. & H. Brit. Moths*, i. 123, pl. 24, f. 2.

Aporophylla australis, *Guén. Noct.* i. 151, 240.

Egira australis, *Dup. Hist. Nat. Lép. Fr.* v. 391, pl. 35.

South France. Corsica.

a—d. England. From Mr. Stephens' collection.

e, f. England. From Mr. Turner's collection.

g, h. England.

i, j. Europe. From M. Becker's collection.

2. APOROPHYLA SCRIPTURA.

Cinerea ; alæ anticæ lineolis obscurioribus, litura discali flavescente. Mas.—Alæ anticæ strigis lanceolatis glaucescentibus ; posticæ albæ. Fœm.—Alæ anticæ linea transversa angulosa glaucescente, fascia exteriori cervina ; posticæ albidæ fusco marginatæ.

Noctua scriptura, Frey. *Neu. Beit. Schmett.* iii. 87, pl. 55, f. 2.

Xylina scriptura, Herr.-Schæff. *Eur. Schmett.* ii. Noct. pl. 98, f. 504, 505.

Aporophylla scriptura, Guén. *Noct.* i. 152, 241.

Turkey.

3. APOROPHYLLA ORIENTALIS.

Cinerea; *alæ anticæ strigis nigricantibus, litura discali guttisque exterioribus et marginalibus flavescens*. Mas.—*Alæ posticæ albæ*. Fœm.—*Alæ posticæ cinereæ, basi albæ*.

Xylina orientalis, Herr.-Schæff. *Eur. Schmett.* ii. pl. 98, f. 502, 503.

Aporophylla orientalis, Guén. *Noct.* i. 153, 242.

Turkey.

Genus 8. SPODOPTERA.

Corpus vix robustum. Proboscis mediocriter longa. Palpi validi, pilosi, ascendentes; articulus 3us brevissimus. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes validi, antici pilosissimi; tibiæ posticæ calcaribus quatuor longis validissimis. Alæ sat angustæ; anticæ apud costam rectæ, apice subangulatæ, margine exteriori perobliquo.

Spodoptera, Guén. *Noct.* i. 153.

Hadena, p., Boisd.

Body hardly stout. Proboscis moderately long. Palpi stout, pilose, ascending; third joint conical, not more than one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with four long and very stout spurs; fore legs very pilose. Wings somewhat narrow. Fore wings straight in front, slightly angular at the tips, very oblique along the exterior border; second inferior vein much nearer to the first than to the third; fourth moderately remote.

Africa.

1. SPODOPTERA ABYSSINIA.

Mas et fœm. *Cinereo fuscescens; palpi cinereo-albi, lateribus nigris; antennæ pubescentes, ciliis verticillatis; alæ anticæ nebulis, macula apicali spatioque medio cinereis, lineis solitis undulatis sat determinatis, maculis discalibus nigris conspicuis completis approximatis, ciliis latis, linea basali flava cinereo marginata, strigulis exterioribus nigris; posticæ albæ.*

Spodoptera Abyssinia, Guén. Noct. i. 154, 244.

Abyssinia.

Mauritius.

2. SPODOPTERA MAURITIA.

Alæ anticæ cinereæ, strigis transversis pallidioribus, macula reniformi nigra quadrata plagaque obscura ad apicem; posticæ albidæ, nitentes.

Hadena Mauritia, Boisd. Faun. Ent. Mad. Bomb. et Maur. Lép. 92, 3, pl. 13, f. 9.

Spodoptera Mauritia, Guén. Noct. i. 153, 243.

Bourbon, Mauritius.

Asia.

3. SPODOPTERA NUBES.

Fusca; abdomen fusco-cinereum; alæ anticæ guttis marginalibus lineisque transversis undulatis nigris, plaga oblonga furcata discali lineaque transversa exterior angulata albis; posticæ albæ, fusco marginatæ.

Spodoptera Nubes, Guén. Noct. i. 155, 246.

Hindostan. Java. Otaheite.

4. SPODOPTERA PECTEN.

Pallide fuscescens; thorax fasciis duabus obscurioribus unaque albido; abdomen et alæ posticæ alba; alæ anticæ maculis costalibus, lineis transversis undulatis liturisque discalibus pallidioribus et obscurioribus, guttis marginalibus nigris.

Spodoptera Pecten, Guén. Noct. i. 155, 247.

Java.

5. SPODOPTERA FILUM.

Pallide fusca; abdomen cinerascens; alæ anticæ guttis costalibus, lineis transversis undulatis annuloque discali pallidioribus et obscurioribus, macula discali nigro-fusca, guttis marginalibus nigris; posticæ albæ, fusco marginatæ.

Spodoptera filum, Guén. Noct. i. 155, 248.

Java.

6. SPODOPTERA CILIUM.

Pallide fusca; thorax fascia undulata nigricante; alæ anticæ annulis duobus discalibus lineisque transversis undulatis pallidioribus et nigricantibus, guttis marginalibus nigris; posticæ albæ.

Spodoptera cilium, Guén. Noct. i. 156, 249.

Java.

Oceania.

7. SPODOPTERA ACRONYCTOIDES.

Alæ anticæ rufo-cinereæ, sat angustæ, lineolis costalibus nigricantibus, linea submarginali e guttis lanceolatis albo-cinereis, striga nigricante maculari reniformem desecante, macula orbiculari subochracea rotundata disco cinereo margine nigricante; posticæ albæ, opalinæ, semihyalinæ, venis apicalibus margineque nigricantibus.

Spodoptera acronyctoides, Guén. Noct. i. 154, 245.

Otaheite.

Genus 9. LAPHYGMA.

Corpus vix robustum. Proboscis breviuscula. Palpi validi, breves, ascendentes; articulus 3us minimus. Antennæ simplices, graciles, corporis dimidio non longiores. Abdomen alas posticas vix superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor longis. Alæ anticæ sat angustæ, apud costam rectæ, apice

rotundatae, margine exteriori mediocriter obliquo; posticae tenues, opalinae, semihyalinae.

Caradrina, p., *Treit.*; *Boisd.*; *Dup.*

Laphygma, *Guén. Noct.* i. 156.

Trigonophora, *Geyer.*

Body hardly stout. Proboscis rather short. Palpi stout, short, ascending; third joint very minute. Antennae simple, slender, about half the length of the body. Abdomen hardly extending beyond the hind wings. Legs moderately stout; hind tibiae with four long spurs. Fore wings rather narrow, straight in front, rounded at the tips, moderately oblique along the exterior border; second inferior vein nearer to the first than to the third; fourth moderately remote. Hind wings delicate, pearly, semihyaline.

Europe.

1. LAPHYGMA EXIGUA.

Cinerascens; alae anticae lineis transversis undulatis subobsoletis pallidioribus et obscurioribus, annulis discalibus orbiculato et reniformi testaceis; posticae albæ, opalinae, semihyalinae.

Noctua exigua, *Hübner. Samml. Eur. Schmett. Noct.* f. 362.

Telmia exigua, *Hübner. Verz. Schmett.* 228, 2286.

Caradrina exigua, *Treit. Schmett. Eur.* ii. 254; *Suppl. x.* 81. *Dup. Hist. Nat. Lép. Fr.* iii. 45, pl. 75. *Boisd. Ind. Méth.* 138, 1112. *Guén. Ann. Soc. Ent. Fr.* vi. 236. *Herr.-Schæff. Eur. Schmett.* ii. 212, 99; ii. *Noct.* pl. 66, f. 44.

Laphygma exigua, *Noct.* i. 158, 252.

South France. Italy. Dalmatia.

a—d. Europe. From M. Becker's collection.

2. LAPHYGMA PYGMÆA.

Alae fusco-subcinereæ, macula subcentrali rufa.

Caradrina pygmæa, *Ramb. Ann. Soc. Ent. Fr.* iii. 384, pl. 8, f. 2.

Dup. Hist. Nat. Lép. Fr. Suppl. iii. 321, pl. 29. *Boisd. Ind. Méth.* 138, 1113. *Guén. Ann. Soc. Ent. Fr.* vi. 236.

Laphygma pygmæa, *Guén. Noct.* i. 158, 253.

Laphygma exigua, var. ?

Marseilles.

North America.

3. LAPHYGMA FRUGIPERDA.

Mas. *Cervina*; *alæ anticæ pallide fuscae, fasciis punctulatis guttisque apicalibus nigris, litura discali cervina, fascia obliqua subapicali albo-glaucæ; posticæ roseo-albæ, fusco apud apices marginatæ.*

Trigonophora frugiperda (Noctua genuina, Achatia communis), Geyer, *Zeitr. Samml. Exot. Schmett.* 22, 342, f. 683, 684.

Phalæna frugiperda, Abbot & Smith, *Nat. Hist. Lep. Ins. Georgia*, ii. 191, pl. 96.

Laphygma frugiperda, Guén. *Noct.* i. 159, 254.

North and South America. Tasmania.

4. LAPHYGMA MACRA.

Subcervina aut pullide fusca; alæ anticæ annulis duobus discalibus lineisque transversis undulatis subobsoletis testaceis; posticæ albæ, opalinæ, cervino marginatæ.

Laphygma macra, Guén. *Noct.* i. 157, 251.

Brazil, &c.

a. New York. Presented by E. Doubleday, Esq.

b. Florida. Presented by E. Doubleday, Esq.

c—e. Cuba. From Mr. Milne's collection.

f. ———? Presented by J. G. Children, Esq.

g. Honduras. From Mr. Miller's collection.

5. LAPHYGMA UNISIGNATA.

Cervina; abdomen pallidum; alæ anticæ macula discali antice nigra guttaque arcuata testacea albido marginata discalibus, lineis duabus obliquis posterioribus albis lineaque transversa undulata diffusa submarginali fusca; posticæ albide.

Fawn-colour. Abdomen paler. Fore wings with a brown discal spot, which is bordered with black in front, and interrupted by a curved testaceous whitish-bordered dot: the latter emits two diverging lines to the interior border; an undulating diffuse brown transverse line near the exterior border. Hind wings whitish. Length of the body $3\frac{1}{2}$ —4 lines; of the wings 8—9 lines.

a. Florida. Presented by E. Doubleday, Esq.

b. ———?

South America.

6. LAPHYGMA? INEPTA.

Fœm. Fusco-cinerea, antennæ corporis dimidio non longiores; alæ anticæ angustæ nitentes, apud marginem exteriorem anticum vix obliquæ; posticæ albæ, opalinæ, semihyalinæ.

Female. Brownish cinereous. Antennæ about half the length of the body. Fore wings shining, narrow, hardly oblique along the fore part of the exterior border. Hind wings white, opaline, semihyaline. Length of the body 5 lines; of the wings 12 lines.

a. Santarem. From Mr. Bates' collection.

b, c. Venezuela. From Mr. Dyson's collection.

Africa.

7. LAPHYGMA CYCLOIDES.

Var.? Pallide cervina; alæ anticæ fusco subconspersæ, lineis duabus submarginalibus transversis angulatis albidis, guttis marginalibus fuscis, annulis discalibus testaceis ex parte fusco marginatis; posticæ albidæ, fusco vix marginatæ.

Laphygma cycloides, Guén. Noct. i. 157, 250.

Cape.

Var.? Pale fawn-colour. Fore wings very minutely speckled with brown, with two submarginal transverse angular whitish lines, the exterior one extending over the ciliæ, and with a row of brown marginal dots; discal ringlets testaceous, partly bordered with brown. Hind wings whitish, hardly bordered with pale brown. Length of the body $4\frac{1}{2}$ lines; of the wings 10 lines.

a, b. South Africa. Presented by Dr. A. Smith.

8. LAPHYGMA? CARADRINOIDES.

Fœm. Cinerea; alæ anticæ mediocriter latæ, lituris costalibus fasciisque angustis subundulatis pallidioribus nigro marginatis, maculis discalibus testaceis, guttis marginalibus nigris; posticæ albidæ, marginibus angustis fuscescentibus.

Cinereous. Fore wings moderately broad, slightly oblique along the exterior border, with some paler blackish bordered costal marks and narrow slightly undulating bands; discal marks testaceous, the outer one reniform and larger than the other, which is elliptical; a row of marginal blackish dots. Hind wings whitish, with narrow brownish borders. Length of the body 5 lines; of the wings 12 lines.

a. Port Natal. From Dr. Krauss' collection.

9. LAPHYGMA? CAPICOLA.

Testaceo-albida; alæ anticæ fasciis variis cinereis, lineis transversis undulatis, litura discali macula exteriori guttisque marginalibus nigricantibus, ciliis fusco notatis; posticæ albæ opalinæ.

Spodoptera capicola, Herr.-Schæff. Léop. Exot. Sp. Nov. f. 131.
Cape.

Country unknown.

10. LAPHYGMA CONCISA.

Pallide cervina; thorax fusco varius; abdomen albidum; alæ anticæ lineis transversis indistinctis lituraque discali undulatis albidis fusco marginatis, venis exterioribus nigricantibus albido fasciatis, areolis exterioribus nigro strigatis; posticæ albidæ, opalinæ, strigis marginalibus fuscescentibus.

Pale fawn-colour. Thorax varied with brown. Abdomen whitish. Fore wings with indistinct transverse undulating whitish brown-bordered lines, and with a serpentine discal mark of the same hue; exterior veins blackish with whitish bands; a blackish streak on each exterior areolet. Hind wings whitish, pearly; tips of the veins and intermediate streaks pale brownish. Length of the body 4 lines; of the wings 10 lines.

a. ——— ? Presented by J. G. Children, Esq.

Genus 10. PRODENIA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, ascendentes, breviusculi; articulus 3us longi-conicus, 2i triente non brevior. Antennæ simplices, graciles, corporis dimidio fere longiores. Abdomen alas posticas triente superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, sat angustæ; anticæ testaceæ et fuscae, apud costam rectæ, apice subangulatæ, margine exteriori subdenticulato sat obliquo.

Trigonophora, p., Hübn. Verz. Schmett. 217.

Neuria, p., Herr.-Schæff.

Hadena, p., Boisd.

Prodenia, Guén. Noct. i. 159.

Body stout. Proboscis moderately long. Palpi stout, ascending, rather short; third joint elongate-conical, about one-third of the length of the second. Antennæ simple, slender, full half the length of the body. Abdomen extending for one-third of its length

	d.d-	-b.a-
	3o of	3o of
	-p'q-	-p'q-
d-	-b.d-	-b.d-
of	3o of	3o of
q-	-p'q-	-p'q-

beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings rather long and narrow. Fore wings testaceous and brown or wood-colour, straight in front, slightly angular at the tips, rather oblique and slightly denticulate along the exterior border; first and second inferior veins contiguous at the base; third more than twice further from the fourth than from the second.

Europe.

1. PRODENIA RETINA.

Cervina; thorax fusco fasciatus; alæ anticæ ex parte fuscae, lituris costalibus basalibus et discalibus albidis, fasciis duabus (una interiore altera exteriori) glaucescentibus, vena mediana venis inferioribus striga obliqua discali lineaque submarginali, strigis exterioribus nigris; posticæ albæ, opalinæ, fusco vix marginatæ.

Hadena littoralis, Boisd. Faun. Ent. Mad. Bomb. et Maur. Lép. 91, 2, pl. 13, f. 8.

Neuria retina, Feiv. Herr.-Schæff. Eur. Schmett. ii. 292. Noct. pl. 29, f. 145.

Prodenia Retina, Guén. Noct. i. 163, 259.

Crete. European Turkey. Asia Minor. Madagascar. Mauritius.

a. Madeira. Presented by Mrs. Hope.

b, c. Congo. Presented by Sir J. Richardson.

d, e. North India. Presented by Gen. Hearsay.

f. Nepaul. Presented by W. W. Saunders, Esq.

g, h. ———? From Mr. Milne's collection.

i, j. ———?

North America.

2. PRODENIA COMMELINÆ.

Cinerascens; thorax fusco nigroque fasciatus et vittatus; alæ anticæ disco fuscescentes, strigis basalibus discalibus et exterioribus nigris, lineis subcostalibus, striga obliqua discali, vena mediana, macula apicali lineaque submarginali albidis, fascia obliqua abbreviata exteriori fusca; posticæ albæ, opalinæ.

Var. *Testacea*; thorax fasciis arcuatis fuscis albidisque; alæ anticæ disco ex parte fuscae, strigis lanceolatis maculaque apicali testaceo-albidis; posticæ albæ, opalinæ, cervino vix marginatæ.

Phalæna commelinæ, Abbot & Smith, Nat. Hist. Lép. Ins. Georgia, ii. 189, pl. 95.

Trigonophora commelinæ, *Hübner. Verz. Schmett.* 217, 2167.

Prodenia commelinæ, *Guén. Noct.* i. 162, 256.

a—c. Georgia. From Mr. Milne's collection.

d—f. ———? Presented by J. G. Children, Esq.

g. Jamaica. From Mr. Gosse's collection.

h. West Indies.

i. Navigators' Isles. Presented by the Entomological Club.

j. Honduras. From Mr. Dyson's collection.

3. PRODENIA ORNITHOGALLI.

Fusco-cinerea; palpi tenuissimi, fere unicolores; abdomen cinereum; alæ anticæ unicolores, macula reniformi bene determinata antice non oculta, macula apicali subalba, linea fusca sat lata fasciam submarginalem albam dividente; posticæ albæ, venis margineque nigris.

Prodenia Ornithogalli, *Guén. Noct.* i. 163, 258.

North America.

4. PRODENIA EUDIOPTA.

Thorax olivaceo-albus, lineis paullo obscurioribus; alæ anticæ basi et apud marginem exteriorem cinereæ, disco ex parte flavo-fuscescente, macula apicali lineaque submarginali albidis, macula orbiculari ochraceo marginata; posticæ albæ, subhyalinæ, venis margineque nigris.

Prodenia eudiopta, *Guén. Noct.* i. 164, 261.

North America?

5. PRODENIA SIGNIFERA.

Pallide cervina; thorax fascia antica nigra; alæ anticæ subferrugineæ, apud discum fuscescentes, lineis transversis undulatis albidis nigrisque, macula apicali alba, annulo orbiculari apud discum testaceo, reniformi ex parte, macula apicali lineaque transversa albis; posticæ albæ, opalinæ, marginibus pallide fuscis.

Pale fawn-colour. Thorax with a black band in front. Fore wings slightly ferruginous, more or less brownish in the disk, with undulating transverse black and whitish lines, and with a white apical spot; orbicular ringlet testaceous in the disk; reniform ringlet partly white; median vein white towards the tip; a white trans-

verse line proceeding hindward from the apical white spot. Hind wings white, pearly, pale brown on the border about the tip. Length of the body 5—6 lines; of the wings 10—12 lines.

a—c. Georgia. From Mr. Abbot's collection.

d. Venezuela. From Mr. Dyson's collection.

West Indies.

6. PRODENIA PLAGIATA.

Cervina; abdomen testaceum, alæ anticæ basi strigaeque obliqua exteriore cinereis, striga obliqua intermedia margineque interiore testaceis, annulis testaceo nigroque marginatis, lineis transversis strigaeque basali nigris maculaque oblonga subapicali alba; posticæ albæ, opalinæ, marginibus angustis pallide fuscis.

Fawn-colour. Abdomen testaceous. Fore wings gray at the base, and with a gray oblique streak which extends from the exterior ringlet to the middle of the exterior border; a testaceous oblique streak between the ringlets extending to a testaceous space along the interior border; ringlets with testaceous black-bordered outlines; the usual black transverse lines; a black basal streak, and a white oblong subapical spot; median vein white at the tip. Hind wings white, pearly, with pale brown narrow borders. Length of the body 5 lines; of the wings 11 lines.

a. Jamaica. From Mr. Gosse's collection.

Var.? Mas. *Testacea*; alæ anticæ cinereæ, fusco ex parte variæ, lineis nonnullis transversis subundulatis nigris, maculis duabus discalibus exteriore nigro varia, vena mediana plagaque apicali albis, strigis nigris lineaque alba submarginalibus, guttis marginalibus nigris; posticæ albæ, opalinæ, semihyalinæ, linea marginali fusca.

Male. Testaceous. Fore wings cinereous, partly shaded with brown, traversed by some slightly undulating black lines; two testaceous discal marks, the outer one accompanied with black and with a forked white streak on the median vein; a white patch at the tip of the wing, emitting a white line hindward near the exterior border, which has a row of black dots, and at a little distance from the latter there are some black streaks. Hind wings white, semihyaline, opaline, with a brown line along part of the exterior border. Length of the body 6 lines; of the wings 13 lines.

Parà. In Mr. J. P. G. Smith's collection.

7. *PRODENIA LATIFASCIA*.

Testacea ; alæ anticæ fascia nigro-cinerea fasciaque exteriori cana lineam albam submarginalem includente, vena mediana, striga brevi obliqua discali annulisque duobus discalibus albido-testaceis ; posticæ albæ, opalinæ.

Testaceous. Fore wings with a blackish gray band near the base, and with a hoary exterior band, which includes a white submarginal line, the latter proceeding from a white apical spot ; median vein and a short oblique discal streak whitish testaceous, the latter approximate to two discal ringlets of the same hue. Hind wings white, opaline. Length of the body 7 lines ; of the wings 16 lines.

Jamaica. In Mr. Saunders' collection.

South America.

8. *PRODENIA ANDROGEA*.

Cervinea ; alæ anticæ fuscæ, luteo albidoque figuratæ, linea transversa submarginali flava, lineolis marginalibus albidis, plaga apicali antice incisa cervina ; posticæ albæ, opalinæ.

Phalæna-Noctua Androgea, Cram. Pap. Exot. iv. 42, pl. 310, f. D.
Prodenia Androgea, Guén. Noct. i. 161, 255.

Surinam.

9. *PRODENIA? PHYTOLACCA*.

Ferruginea ; caput et thorax testaceo univittata ; thorax strigis quatuor obliquis lateribus albidis ; abdomen testaceum, vitta fasciisque cinereis ; alæ anticæ ex parte pallidiores, macularum marginibus fasciisque obliquis cinereis ; posticæ nigro-cinereæ, basi testaceæ.

Phalæna-Noctua Phytolacca, Anon. Ins. Surin. i. 81, pl. 40.

Surinam.

Mauritius.

10. *PRODENIA TESTACEOIDES*.

Fusca ; thorax lineolis transversis albidis ; abdomen testaceum ; alæ anticæ apud margines pallidiores, nigro strigatæ, annulis discalibus lineisque transversis albidis nigro marginatis, vena mediana, fascia submarginali maculaque apicali albidis ; posticæ albæ, opalinæ, fusco vix marginatæ.

Prodenia testaceoides, Guén. Noct. i. 165, 262.

Mauritius. Hindostan.

a. Ceylon. Presented by R. Templeton, Esq.

Asia.

11. *PRODENIA CILIGERA*.

Pallide cinerascens; thorax fasciis fuscis nigrisque lineisque duabus nigris; alæ anticæ fuscae nigro-fusco roseoque variæ, lineolis nigris, venis ex parte, plaga obliqua lituraque furcata discalibus albidis; posticæ albæ, fusco marginatæ.

Prodenia ciligera, Guén. Noct. i. 164, 260.

Java.

12. *PRODENIA INFECTA*.

Testacea; alæ anticæ lineis transversis indistinctis fuscis, macula reniformi apud discum nigro-fusca, macula submarginali fusca, guttis marginalibus nigro-fuscis; posticæ albæ, opalinæ, marginibus angustis pallide fuscis.

Testaceous. Fore wings with indistinct transverse brown lines; disk of the exterior ringlet dark brown; a brown spot near the middle of the exterior border, along which there is a row of dark brown dots. Hind wings white, pearly, with narrow pale brown borders. Length of the body $4\frac{1}{2}$ lines; of the wings 11 lines.

a. North India. From Mr. James' collection.

13. *PRODENIA SUBTERMINALIS*.

Cervina; thorax antice obscurior; abdomen pallidum; alæ anticæ lineis transversis undulatis vittaque extus dilatata fuscis, fascia obliqua albida, maculis duabus submarginalibus lineaque intermedia albis, anuulis testaceis fusco marginatis, reniformi apud discum fusco, guttis marginalibus nigro-fuscis; posticæ albæ, opalinæ, marginibus pallide fuscis.

Fawn-colour. Thorax darker in front. Abdomen paler. Fore wings with transverse undulating brown lines, with a slight brown stripe, which is dilated exteriorly, with a whitish oblique band, which begins between the ringlets, with a white subapical spot, which emits a white line hindward to another whitish spot by the interior angle; ringlets testaceous, with brown borders, the reni-

form one with a brown disk; a row of dark brown marginal dots. Hind wings white, pearly, with pale brown borders. Length of the body $5\frac{1}{2}$ lines; of the wings 12 lines.

a. Punjaub. Presented by Gen. Hearsay.

b. North India. From Mr. James' collection.

14. *PRODENIA INSIGNATA*.

Pallide testacea; thorax cervino varius; alæ anticæ pallide cervinæ, lineis variis transversis, lituris discalibus fasciæque exteriore testaceo-albis, ex parte fusco marginatis, lineis marginalibus fuscis strigæque obliqua apicali alba; posticæ albæ, opalinæ, fusco vix marginatæ.

Pale testaceous. Thorax varied with fawn-colour. Fore wings pale fawn-colour, with various testaceous white transverse lines, which are partly bordered with brown; with discal marks, and with an exterior band of the same hue, the band interrupting a row of marginal brown lines, and shortened in front by an oblique apical white streak. Hind wings white, pearly, hardly bordered with brown. Length of the body 4 lines; of the wings 10 lines.

a. North India. From Mr. James' collection.

15. *PRODENIA GLAUCISTRIGA*.

Testacea; thorax fasciis nonnullis anticis arcuatis fuscescentibus; alæ anticæ fuscescente et strigis nigricantibus albidisque variæ, fasciis latis duabus glaucis unaque abbreviata cervina, vitta brevi obliqua albida testaceo strigata, vena mediana albida; posticæ albæ, opalinæ, semihyalinæ.

Testaceous. Thorax with some slight brownish curved bands in front. Fore wings brownish, and with blackish and whitish streaks here and there, the rest of the wing being occupied by three broad bands; the first and the third glaucous; the middle one fawn-colour, abbreviated in front, where it is bounded by a short oblique whitish stripe, the latter containing testaceous streaks; median vein and part of the inferior veins whitish. Hind wings white, opaline, semihyaline. Length of the body 6—8 lines; of the wings 14—16 lines.

a. North India. Presented by the Entomological Club.

b. North India. From Mr. James' collection.

c. North India. From Mr. Stevens' collection.

d. Canara. Presented by S. N. Ward, Esq.

Australia.

16. *PRODENIA TASMANICA*.

Alæ anticæ opalino-cinereæ, venis maculisque discalibus flavo-albo roseis, maculis lineisque marginalibus cinereo-albis vix roseis, macula fusca submarginali longa e strigis lanceolatis plurimis divisa et producta; posticæ albæ, margine nigricante.

Prodenia Tasmanica, Guén. Noct. i. 163, 277.

Tasmania.

Genus 11. *CALOGRAMMA*.

Corpus robustum. Proboscis brevis. Palpi breves, porrecti, caput non superantes; articulus 3us conicus, 2i quadrante non longior. Antennæ corporis dimidio non longiores. Thorax pilosissimus. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriori sat obliquo. *Mas.*—Antennæ subserratæ.

Polia, p., *Boisd.*

Calogramma, Guén. Noct. i. 165.

Body stout. Proboscis short. Palpi short, porrect, not extending beyond the head; third joint conical, not more than one-fourth of the length of the second. Antennæ about half the length of the body. Thorax thickly clothed. Abdomen extending for one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, slightly rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins nearly contiguous at the base; fourth moderately remote. *Male.*—Antennæ minutely serrated.

1. *CALOGRAMMA FESTIVA*.

Testacea; thorax rufo varius; alæ anticæ albido-testacea nigro-rufoque variæ; posticæ albæ, opalinæ.

Noctua festiva, Donov. Epit. Ins. New Holl.

Polia picta, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 241. *Guén.*

Voy. de la Coquille, ii. 285, pl. 19, f. 7. (*Noctua picta*.)

Calogramma picta, *Guén. Noct.* i. 166, 263.

New Holland.

a, b. New South Wales. From Mr. Wood's collection.

c. Ceylon. Presented by R. Templeton, Esq.

d. ———? From Mr. Milne's collection.

e. ———?

Genus 12. NEURIA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, subascendentes; articulus 3us cylindricus, 2i quadrante brevior. Antennæ corporis dimidio multo longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ, anticæ apud costam subrectæ, apice angulatæ, margine exteriori subobliquo vix convexo. *Mas.*—Antennæ subcrenulatæ.

Hadena, p., *Treit.*; *Meig.*; *Steph. Ill. Brit. Ent. Haust.*

Neuria, *Guén. Ind.* 241; *Noct.* i. 166. *Dup.*; *Steph. Cat. Brit. Lep.*

Body stout. Proboscis moderately long. Palpi stout, pilose, slightly ascending; third joint cylindrical, not one-fourth of the length of the second. Antennæ much more than half the length of the body. Abdomen extending for about one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings almost straight in front, angular at the tips, slightly oblique and hardly convex along the exterior border; first, second and third inferior veins contiguous at the base; fourth remote. *Male.*—Antennæ minutely crenulated.

1. NEURIA SAPONARIÆ.

Fuscescens; thorax lineis transversis albidis; abdomen cinereo-albidum; alæ anticæ fusæ, venis ex maxima parte, annulis duobus oblongis transversis discalibus (exteriore apud medium coarctato) lineisque transversis undulatis sordide albidis nigricante marginatis, annulis discalibus, strigis lanceolatis exterioribus guttisque marginalibus nigris; posticæ cinereo-albidæ, fusco late marginatæ.

—————, *Engr. Pap. d'Eur.* 462, a—c. *Deg. Ins.* ii. 233, pl. 7, f. 27.

- Noctua Saponariæ, *Esp. Schmett.* iv. pl. 198, f. 3, 4. *Bork. Eur. Schmett.* iv. 270, 152. *Frey. N. Beitr.* iii. pl. 231.
- Neuria Saponariæ, *Dup. Hist. Nat. Lép. Fr.* vi. 272, pl. 90, f. 2. *Guén. Noct.* i. 167, 264. *Steph. Cat. Brit. Lep.* 96.
- Noctua Calcatrippa, *View. Schmett.* 71, 111.
- Noctua typica, *Hübner. Samml. Eur. Schmett. Noct.* pl. 12, f. 58.
- Noctua marginosa, *Haw. Lep. Brit.* 101.
- Noctua (Hadena) Saponariæ, *Meig. Syst. Besch.* iii. 105, 42, pl. 97, f. 3.
- Hadena Saponariæ, *Hübner. Verz. Schmett.* 216, 2153. *Treit. Schmett. Eur.* v. 1, 303, 1. *Steph. Ill. Brit. Ent. Haust.* ii. 189. *Boisd. Ind. Méth.* 119, 932. *Westw. & H. Brit. Moths,* i. 168, pl. 34, f. 11. *Herr.-Schæff. Eur. Schmett.* ii. 293, 345.
- a—l. England. From Mr. Stephens' collection.
- m, n. England.
- o—q. Europe. From M. Becker's collection.

2. NEURIA DENTIGERA.

Cervino-fusca; alæ anticæ disco margineque exteriori ex parte nigricantibus, fasciis tribus annulis discalibus lituraque posteriore albidis; posticæ cinereæ fascia pallidiore.

- Hadena dentigera, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837, 1; *Faun. Volg-Ural.* 218.
- Noctua Dianthi? *Hübner. Samml. Eur. Schmett.* f. 587. *God. Hist. Nat. Lép. Fr.* v. pl. 65, f. 6.
- Hadena Dianthi? *Hübner. Verz. Schmett.* 216, 2156.
- Noctua (Agrotis) Dianthi? *Meig. Syst. Besch.* iii. 85, 6, pl. 95, f. 5.
- Neuria dentigera, *Guén. Noct.* i. 167, 265.
- Ural Region. Shores of the Caspian.

Genus 13. CHIRIPHA.

Mas. Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, oblique ascendentes; articulus 3us conicus, minimus. Antennæ serratæ, corporis dimidio paullo longiores. Abdomen alas posticas fere dimidio superans, apice fasciculatum. Pedes longiusculi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriori recto perobliquo.

Male. Body stout. Proboscis moderately long. Palpi stout,

pilose, obliquely ascending; third joint conical, very minute. Antennæ a little more than half the length of the body, serrated. Abdomen extending for almost half its length beyond the hind wings, tufted at the tip. Legs rather long; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, almost acutely angular at the tips, straight and very oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote.

1. CHIRIPHA INVOLUTA.

Mas. *Fusca; caput fasciis albidis; thorax fasciis anticis vittisque posticis albidis; abdomen albidum; alæ anticæ lituris lanceolatis nigris albo marginatis aut lineatis, linea recta albida costali lineaque marginali alba; posticæ albidæ, marginibus latis fuscescentibus.*

Male. Brown. Head with whitish bands. Thorax with whitish bands in front, and with whitish stripes on each side. Abdomen whitish. Fore wings with lanceolate black marks, which are bordered or intersected by whitish lines; a straight whitish subcostal line, and a white marginal line; ciliæ with alternate brownish and whitish lines. Hind wings whitish, with broad pale brown borders. Wings beneath whitish, shaded in front with pale brown; discal spot and an exterior oblique band dark brown. Length of the body 10 lines; of the wings 18 lines.

Hindustan. In Mr. Saunders' collection.

Genus 14. DARGIDA.

Mas. Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, ascendentes; articulus 3us minimus. Antennæ subciliatæ, corporis dimidio longiores. Abdomen alas posticas triente superans, basi cristatum. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocriter latæ, anticæ apud marginem exteriorem denticulatæ sat obliquæ vix convexæ.

Male. Body stout. Proboscis moderately long. Palpi stout, pilose, ascending; third joint extremely minute. Antennæ very minutely ciliated, more than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings, crested towards the base. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately broad, denticulate, rather oblique, and hardly convex along the exterior border; first, second and third inferior veins approximate; fourth moderately remote.

1. DARGIDA GRAMMIVORA.

Mas. *Fusca, purpureo glaucoque subincta; thorax fasciis pallidioribus et obscurioribus anticis, vittis tribus posticis albidis; abdomen cinereum; alæ anticæ lituris, vitta discali, fascia obliqua exteriori guttis submarginalibus flavo-albis; posticæ sordide albidæ, gutta discali margineque lato fuscis.*

—— grammivora, Morritz, MSS.

Male. Brown, with slight purplish and glaucous reflections. Thorax in front with alternate paler and darker curved bands; hind part with three whitish stripes. Abdomen cinereous. Fore wings with a discal stripe, and an oblique exterior band yellowish white; some marks on each side of the stripe, and a row of dots beyond the band of the same hue; the stripe forked towards its tip; ciliæ with a yellow scalloped transverse line, and intersected with white opposite the veins. Hind wings dingy whitish, with a brown discal dot and a broad brown border. Length of the body 5—7 lines; of the wings 12—16 lines.

Rio Grande.

a—c. Venezuela. From Mr. Dyson's collection.

Genus 15. FELTIA.

Mas. Corpus sat gracile. Proboscis mediocriter longa. Palpi porrecti, pilosi, sat graciles, caput superantes; articulus 3us cylindricus, 2i triente brevior. Antennæ serratæ, corporis dimidio longiores. Abdomen alas posticas paullo superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori vix obliquo.

Male. Body rather slender. Proboscis moderately long. Palpi porrect, pilose, rather slender, extending somewhat beyond the head; third joint cylindrical, full one-fourth of the length of the second. Antennæ serrated, more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs rather long and slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, hardly oblique along the exterior border; first, second and third inferior veins approximate; fourth moderately remote.

1. FELTIA DUCENS.

Mas. *Cinerea; thorax fasciis anticis nigris; alæ anticae apud discum fuscae nigro strigatae, macula discali testacea, margine pallidior nigroque conspersa, linea albida interiore furcata, fascia exterior pallida, lunulis marginalibus nigris, venis ex parte albis; posticae sordide albae, marginibus latis fuscescentibus.*

Male. Cinereous. Thorax with blackish bands in front. Fore wings mostly brown, and streaked with black in the disk; discal mark testaceous, with a paler border, and speckled with black; an interior irregular whitish line forked hindward near the base; a pale outer band dividing the brown part in the disk from that along the exterior border, where there is a row of black lunules; veins partly white. Hind wings dingy whitish, with broad brownish borders. Length of the body 6 lines; of the wings 14 lines.

a. Orilla. West Canada. From Mr. Bush's collection.

Subfam. 3. EPISEMIDES.

Episemides, Guén. Noct. i. 168.

A. Palpi ascendentes. - - - 1. HELIOPHOBUS, Boisd.

B. Palpi porrecti.

A. Antennarum articulus 2us 3o quadruplo longior.

A. Abdomen alas posticas triente superans. 2. EPISEMA, Ochs.

B. Abdomen alas posticas perpaullo superans.

3. CHARÆAS, Steph.

B. Antennarum articulus 3us 2i triente longior.

4. PACHETRA, Guén.

Genus 1. HELIOPHOBUS.

Corpus robustum, pilosissimum. Proboscis mediocriter longa. Palpi validi, pilosi, ascendentes; articulus 3us longi-conicus, 2i quadrante non longior. Antennæ corporis dimidio non longiores. Abdomen alas posticas triente superans. Pedes pilosissimi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticae signatæ, venis pallidis, apud costam rectæ, apice subangulatæ, margine exterior vix obliquo. Mas.—Antennæ late pectinatæ. Abdomen apice fasciculatum.

Neuronia, *Hübner. Verz. Schmett.* 215.

Heliophobus, *Boisd. Ind. Méth.*; *Steph.*; *Duponch.*; *Guénée, Ann. Soc. Ent. Fr.* vi. 350; *Noct.* i. 168.

Episema, p., *Boisd.*

Episema et Hadena, *Treits.*

Heliophobus et Cladocera, *Ramb.*

Neuria, p., et Orthosia, p., *Herr.-Schæff.*

Body stout, very pilose. Proboscis moderately long. Palpi stout, pilose, ascending; third joint elongate-conical, about one-fourth of the length of the second. Antennæ about half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs very pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings with various markings, and with pale lines on the veins, straight in front, slightly angular at the tips, very slightly oblique along the exterior border; second inferior vein a little nearer to the third than to the first; fourth moderately remote. *Male*.—Antennæ deeply pectinated. Abdomen tufted at the tip.

Group 1. Type.

1. HELIOPHOBUS POPULARIS.

Fuscus; thorax albido nigroque lineatus; abdomen albidum, postice obscurius fusco fasciatum; alæ anticæ albido venosæ lineolis marginalibus nigris fuscisque annulis discalibus testaceis nigro marginatis, lineis transversis duplicatis interioribus denticulisque exterioribus nigris, his testaceo fasciatis; posticæ sordide albidæ, margine lato cinereo.

———, *Engr. Pap. d'Eur.* 244, a—c. *Fabr. Syst. Ent.* 577, 71.

Phalæna-Bombyx popularis *Gmel. ed. Syst. Nat.* i. 5, 2440, 576.

Bombyx popularis, *Fabr. Mant. Ins.* ii. 133, 209; *Ent. Syst.* iii. 1, 484, 240. *Oliv. Enc. Méth.* v. 101, 264. *Klum, Brit. Ins. Ges.* ii. pl. 2. *Haw. Lep. Brit.* 63.

Noctua graminis, *Wien. Verz.* 82, 3. *Hübner. Samml. Eur. Schmett. Noct.* 59.

Neuronia popularis, *Hübner. Verz. Schmett.* 215, 2148.

Hadena Popularis, *Treit. Schmett. Eur.* v. 1, 316, 5.

Bombyx Lolii, *Esp. Schmett.* iv. pl. 198, f. 3, 4. *Bork. Eur. Schmett.* iv. 398, 161.

Noctua (Hadena) popularis, *Meig. Handb.* 159, 31; *Syst. Besch.* iii. 105, 41, pl. 97, f. 2.

Heliophobus popularis, *Boisd. Ind. Méth.* 112, 864. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 90, f. 5. *Steph. Ill. Brit. Ent. Haust.* ii. 189. *Guén. Noct.* i. 170, 266.

Neuria popularis, *Herr.-Schæff. Eur. Schmett.* ii. 291, 340.

a—h. England. From Mr. Stephens' collection.

i—l. England.

m—o. Europe. From M. Becker's collection.

2. HELIOPHOBUS VITTALBA.

Fusco-testacea ; alæ anticæ signaturis omnibus et margine anteriore roseo-albis, stigmatibus 3o fundo concolore ; posticæ albidæ, fascia submarginali obscuriore.

Hadena vittalba, *Treit. Schmett. Eur. Suppl.* x. 40.

Noctua vittalba, *Frey. Neu. Beit. Schmett.* ii. 48, pl. 124.

Heliophobus vittalba, *Boisd. Icon. Lép. d'Eur.* pl. 73 ; *Ind. Méth.* 112, 863. *Guén. Ann. Soc. Ent. Fr.* vi. 241 ; *Noct.* i. 170, 267.

Neuria vittalba, *Herr.-Schæff. Eur. Schmett.* ii. 291, 341 ; ii. *Noct.* pl. 7, f. 34—36.

Sicily.

Group 2.

Fæm. Alæ brevissimæ.

Female with the rudiments of wings.

3. HELIOPHOBUS HIRTA.

Fuscescens ; alæ anticæ lineis duabus transversis obliquis, annulis discalibus strigisque posteriore albidis nigro marginatis, venis albidis, strigis exterioribus nigris ; posticæ cinereæ, ciliis albidis.

Noctua hirta, *Hübner. Samml. Eur. Schmett.* 591.

Episema hirta, *Hübner. Verz. Schmett.* 224, 2250.

Heliophobus hirta, *Boisd. Icon. Lép. d'Eur.* pl. 74 ; *Ind. Méth.* 112, 862. *Eversm. Bull. Soc. Imp. Nat. Mosc.* 186. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 176, pl. 16, f. 4. *Guenée, Ann. Soc. Ent. Fr. 2me Sér.* viii. *Bull.* viii. ; *Noct.* i. 171, 268.

Neuria hirta, *Herr.-Schæff. Eur. Schmett.* ii. 290, 339.

South Russia.

a. Odessa. Presented by Dr. Dowler.

b. Europe. From M. Becker's collection.

Group 3.

Palpi articulo 3o brevi. Tibiæ anticæ spinosæ.

Cladocera, p., *Ramb.*

Third joint of the palpi short. Fore tibiæ spinose.

4. HELIOPHOBUS OPTABILIS.

Albida; alæ anticæ disco cinerascete, strigis submarginalibus nigris, annulis discalibus vittaque basali furcata testaceis albido nigroque marginatæ. Fœm. — Alæ posticæ cinereo marginatæ.

Heliophobus optabilis, *Boisd. Icon. Lép. d'Eur.* pl. 74; *Ind. Méth.* 112, 859. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 170, pl. 16. *Herr.-Schæff. Eur. Schmett.* ii. Noct. pl. 7, f. 31—33. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 171, 269.

South France. Spain. South Russia.

Group 4.

Palpi articulo 3o longiusculo. Tibiæ anticæ spinosæ.

Cladocera, p., *Ramb.*

Third joint of the palpi rather long. Fore tibiæ spinose.

5. HELIOPHOBUS BÆTICA.

Albida; thorax testaceo nigroque fasciatus et vittatus; alæ anticæ testaceo variæ, annulis duobus discalibus, lituris posterioribus, strigis exterioribus guttisque submarginalibus nigris.

Heliophobus Bætica, *Boisd. Icon. Lép. d'Eur.* pl. 74, f. 6; *Ind. Méth.* 112, 860. *Ramb. Faune Andal. Dup. Hist. Nat. Lép. Fr.* iii. 215, pl. 20. *Herr.-Schæff. Eur. Schmett.* ii. Noct. pl. 5, f. 23. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 171, 269.

South Spain.

Group 5.

*Episemæ affinis.*Allied to *Episema*.

6. HELIOPHOBUS? ODITES.

*Fusca; thorax flavo varius; alæ anticæ flavo subreticulatæ, strigis exterioribus guttisque marginalibus nigris, linea submarginali flava; posticæ subtestaceæ, fascia margineque cinereis.*Noctua Odites, *Hübner. Samml. Eur. Schmett. Noct.* 694.Heliophobus Odites, *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 172, 272.Episema Odites, *Boisd. Ind. Méth.* 139, 1118.This species hardly belongs to the genus *Heliophobus*.

South Russia.

7. HELIOPHOBUS HISPIDA.

*Cinerea; abdomen basi canescens; alæ anticæ lituris basalibus et costalibus, fasciis tribus, ocello discali, strigis lanceolatis exterioribus venisque canescentibus nigro ex parte marginatis; posticæ cinerascens.*Noctua hispida, *Hübner. Samml. Eur. Schmett. Noct.* pl. 166, f. 784—786.Hadena hispida, *Treit. Schmett. Eur. Suppl.* x. 39.Heliophobus hispida, *Boisd. Icon. Léop d'Eur.* pl. 72, f. 6, 7. *Guén. Ann. Soc. Ent. Fr.* vi. 241; *Noct.* i. 172, 273.Heliophobus hirta, *Dup. Hist. Nat. Léop. Fr.* iii. 275, pl. 90.Heliophobus hispidus, *Steph. Cat. Brit. Lep.* 97.Episema hispida, *Boisd. Ind. Méth.* 139, 1119.Episema pilosa, *Boisd. Ind. Méth.* ed. 1.Orthosia hispida, *Herr.-Schæff. Eur. Schmett.* ii. 195, 41.

a, b. England. From Mr. Stephens' collection.

c, d. Isle of Portland. From Mr. Stevens' collection.

e. Europe. From M. Becker's collection.

North America.

8. HELIOPHOBUS FIMBRIARIS.

Cano-cervina; abdomen pallide testaceum; alæ anticæ gutta lunulisque discalibus testaceis nigro marginatis, lineis duabus transversis (una interiore, altera exteriori guttulari) albidis fusco marginatis, lunulis marginalibus nigris; posticæ canæ, fascia submarginali fuscescente.

Heliophobus fimbriaris, Guén. Noct. i. 172, 271.

a. United States. Presented by E. Doubleday, Esq.

Genus 2. EPISEMA.

Corpus validum, pilosum. Proboscis brevis. Palpi porrecti, pilosi; articulus 3us subcylindricus, 2i quadrante non longior. Antennæ corporis dimidio longiores. Abdomen alas posticas triente superans. Pedes pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ lituris venisque pallidis, apud costam rectæ, apice rotundatæ, margine exteriori vix obliquo. *Mas.*—Antennæ late pectinatæ.

Episema, Ochs.; Treit.; Boisd.; Guén.; Dup.; Meig.

Body stout, pilose. Proboscis short. Palpi porrect, pilose; third joint nearly cylindrical, about one-fourth of the length of the second. Antennæ more than half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings with pale lines on the veins and other pale marks, straight in front, rounded at the tips, very slightly oblique along the exterior border; first, second and third inferior veins approximate; fourth rather remote. *Male.*—Antennæ deeply pectinated.

1. EPISEMA HISPANA.

Alæ anticæ supra albido vel cinereo-subrufescentes, maculis obscurioribus, lineis duabus transversis, interna in medio angulosa; antennæ maris valde et ad apices pectinatæ.

Episema hispana, Rambur, Ann. Soc. Ent. Fr. 2me Sér. vi. 66; Rev. Zool. 1847, 238, 3. Guén. Noct. i. 173, 274. Meig. Syst. Besch. iii. 60, 3, pl. 89, f. 10.

Episema trimacula, Duponch. Hist. Nat. Lép. vi. 193, pl. 85, f. 3.

Spain. Algeria.

a. Europe. From M. Becker's collection.

2. EPISEMA TRIMACULA.

Cana, nigro conspersa; abdomen albidum; alæ anticæ fasciis tribus abbreviatis nigricantibus albo marginatis, 1a arcuata, 2a brevissima maculari, 3a undulata, ciliis cinereis; posticæ albidæ.

Bombyx trimacula, Wien. Verz. Bomb. M. 4.

Noctua trimacula, Hübn. Samml. Exot. Schmett. 141, 2.

Episema trimacula, Hübn. Verz. Schmett. 224, 2251. Treit. Schmett. Eur. i. 117. Boisd. Icon. Lép. d'Eur. pl. 72, f. 1; Ind. Méth. 139, 1121. Herr.-Schæff Eur. Schmett. ii. Noct. pl. 22, f. 106. Guén. Ann. Soc. Ent. Fr. vi. 241; Noct. i. 174, 275.

Var. Statura E. trimaculæ et illi subaffinis; alæ anticæ cinereo-fuscæ, maculis ordinariis unaque subjacente venosis coadunatis albido-rufescentibus, macula basali albido-rufescente nigro marginata, fascia externa albicante: posticæ albæ.

Episema hispana, Boisd. Icon. pl. 92, f. 4, 5. Dup. Hist. Nat. Lép. Fr. Suppl. iii. 68, pl. 16.

Episema trimacula, var., Treit. Guén. Herr.-Schæff. Eur. Schmett. ii. Noct. pl. 22, f. 105.

Orthosia trimacula, Herr.-Schæff. Eur. Schmett. ii. 195, 40.

a, b. Europe. From M. Becker's collection.

Var. Cinereo-cana; thorax antice cano fuscoque fasciatus; alæ anticæ albo venosæ, fasciis duabus marginatis (una basali, altera exteriori) albidis, disco nigro-fusco maculis duabus connexis fuscescentibus, linea undulata marginali nigra; posticæ cinereæ.

—————, *Engr. Pap. d'Eur. 142, a, d, bis.*

Noctua tersa, Wien. Verz. 8, 9. Hübn. Samml. Eur. Schmett. Bomb. 140.

Episema tersa, Hübn. Verz. Schmett. 224, 2249. Treit. Schmett. Eur. i. 118. Boisd. Icon. Lép. d'Eur. pl. 72, f. 2, 3. Dup. Hist. Nat. Lép. Fr. Suppl. iii. 164, pl. 15.

Noctua glaucina, Esp. Schmett. pl. 81, f. 5. Frey. Ent. Zeit. Stett. ii. 92.

c. Europe. From M. Becker's collection.

Var. *Alæ anticæ omnino helveolæ punctis pallidioribus.*

Episema unicolor, *Duponch. Ann. Soc. Ent. Fr.* iv. 193, pl. 41, f. 1; *Hist. Nat. Lép. Fr. Suppl.* 166, pl. 45

France. Switzerland. Austria. Hungary.

South America:

3. EPISEMA? SCOTICA.

Fœm. *Cinerea*; *abdomen fuscum*; *alæ anticæ strigis discalibus fasciisque duabus subapicalibus flavis, punctis duobus discalibus nigricantibus*; *posticæ antice canæ.*

Episema Scotica (*Noctua genuina*, *Graphiphora perspicua*), *Hübner. Samml. Exot. Schmett.* ii. 28, 180, f. 359, 360.

Buenos Ayres.

Africa.

4. EPISEMA? PIERRETI.

Alæ anticæ fusco-cinereæ lineis tribus transversis obsoletis rufescentibus; *posticæ albidæ.*

Episema? Pierreti, *Bugnion, Ann. Soc. Ent. Fr.* vi. 441, pl. 16, f. 3.

Alexandria, Egypt.

Genus 3. CHARÆAS.

Corpus pilosum, vix robustum. Proboscis brevis. Palpi porrecti, pilosi, caput perpaullo superantes; articulus 3us longi-conicus, 2i quadrante non longior. Antennæ corporis dimidio paullo longiores. Abdomen alas posticas perpaullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ vix latæ; anticæ obscuræ venis liturisque pallidis, apud costam rectæ, apice vix angulatæ, margine exteriori subobliquo. *Mas.*—Antennæ subpectinatae.

Lycophotia, p., *Hübner. Verz. Schmett.* 215.

Heliophobus, p., *Boisd.*

Charæas, p., *Steph.*; *Dup.*; *Guén.*

Cerapteryx, *Curt. Brit. Ent.* x. 451. *Steph. Cat. Brit. Lep.*

Body pilose, hardly stout. Proboscis short. Palpi porrect, pilose, extending very little beyond the head; third joint elongate, conical, about one-fourth of the length of the second. Antennæ a little more than half the length of the body. Abdomen extending a very beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings hardly broad. Fore wings dark, with pale veins and markings, straight in front, hardly angular at the tips, slightly oblique along the exterior border; first, second and third inferior veins approximate; fourth remote. *Male*.—Antennæ slightly pectinated.

1. CHARÆAS GRAMINIS.

Fusca; abdomen cinerascens, apice fulvescens; alæ anticæ venis, macula annuloque discalibus vittaque diffusa exteriori albidis; posticæ basim versus albicantes, ciliis albidis.

———, *Raii, Ins.* 128, 4. *Frisch, Ins.* 10, pl. 21. *Harr. Engl. Ins.* pl. 5, f. 7. *Deg. Ins.* ii. 340, 5. *Engr. Pap. d'Eur.* pl. 395, a—d.

Phalæna-Bombyx graminis, Linn. Syst. Nat. i. 506, 73; *Faun. Suec.* 1140. *Act. Holm.* 40, pl. 2. *Gmel. ed. Syst. Nat.* i. 5, 2440, 73.

Bombyx graminis, Fabr. Sp. Ins. ii. 204, 148; *Mant. Ins.* ii. 133, 208; *Ent. Syst.* iii. 239. *Wien. Verz.* 82, 3. *Esp. Schmett. Eur.* pl. 68, f. 1. *Bork. Eur. Schmett.* 171. *Haw. Lep. Brit.* 117, 186. *Oliv. Enc. Méth.* v. 101, 263. *Donov. Hist. Nat. Brit. Ins.* pl. 458. *Hübner. Eur. Schmett. Bomb.* f. 480, 481.

Bombyx tricuspis, Esp. Schmett. Eur. iii. 348, pl. 68, f. 2, 3.

Lycophotia graminis, Hübn. Verz. Schmett. 215, 2146.

Episema graminis, Treit. Schmett. Eur. i. 120.

Xylina graminis, Meig. Syst. Besch. iii. 186, 12, pl. 110, f. 6; *Handb.* 154, 16.

Charæas graminis, Steph. Il. Brit. Ent. Haust. ii. 111. *Dup. Hist. Nat. Léop. Fr.* iii. 195, pl. 85. *Guén. Noct.* i. 176, 276.

Heliophobus graminis, Boisd. Ind. Méth. 112, 861; *Icon.* pl. 74.

Cerapteryx graminis, Curt. Brit. Ent. x. 451. *Steph. Cat. Brit. Lep.* 62.

Cerapteryx hibernica, Curt. Brit. Ent. x. 451.

Episema albineura, Boisd. Icon. pl. 74, f. 4.

a—j. England. From Mr. Stephens' collection.

k—n. England.

o, p. Scotland. From Mr. Foxcroft's collection.

q. Europe. From M. Becker's collection.

North America.

2. CHARÆAS? DETERSA.

Mas et fœm. *Pallide cervina; thorax fascia fuscescente; abdomen albido-testaceum; tarsi fusco fasciati; alæ anticæ pallide fuscæ punctis obscurioribus, costa venis, maculis discalibus fasciæque exteriori albidis, lunulis marginalibus obscure fuscis; posticæ pallidissime cinereæ marginibus fuscescentibus, ciliis albidis.*

Male and female. Pale fawn-colour. Third joint of the palpi rather longer than in *C. graminis*. Thorax with a brownish band. Abdomen whitish testaceous. Tarsi with brown bands. Fore wings pale brown, slightly speckled with darker brown; the costa, the veins, the two discal spots, and an exterior band whitish; discal spots with dark borders, the orbicular one rather oblong, the other somewhat reniform; exterior border with dark brown lunules. Hind wings very pale cinereous, with brownish borders and whitish ciliæ. Length of the body 6 lines; of the wings 14 lines.

a—d. Nova Scotia. From Lieut. Redman's collection.

South America.

3. CHARÆAS? SANNIO.

Cervina; alæ anticæ testacæ, basi fuscæ venis, macula anteriore strigæque posteriore testaceis, strigis submarginalibus fasciæque marginali fuscis; posticæ ciliis testaceis.

Phalæna Sannio, *Cram. Pap. Exot.* iv. pl. 399, f. D.

Lycophotia Sannio, *Hübner. Verz. Schmett.* 215, 2147.

Surinam.

Genus 4. PACHETRA.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi, caput paullo superantes; articulus 3us longi-conicus, 2i triente longior. Antennæ corporis dimidio longiores. Abdomen alas posticas perpaullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori denticulato et mediocriter obliquo. *Mas.*—Antennæ subserratæ.

Mamestra, p., *Hübner. Verz. Schmett.* 214.

Hadena, p., *Treit.*

Luperina, p., *Boisd.*

Polia, p., *Herr.-Schæff.*

Heliphobus, p., *Steph. Ill. Brit. Ent. Haust.*

Pachetra, *Guén. Ind.* 241; *Noct.* i. 177. *Steph. Cat. Brit. Lep.*

Body stout. Proboscis moderately long. Palpi porrect, pilose, extending a little beyond the head; third joint elongate-conical, more than one-third of the length of the second. Antennæ more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, denticulated and moderately oblique along the exterior border; second inferior vein about equally distant from the first and from the third; fourth moderately remote from the third. *Male*.—Antennæ very minutely serrated.

1. PACHETRA LEUCOPHÆA.

Canescens; thorax fusco fasciatus; alæ ciliis albis fusco notatis; anticæ fusco variæ, annulis duobus discalibus albis, litura posteriore, lineis duabus undulatis transversis strigisque exterioribus nigris; posticæ pallide cinerascens.

- , *Engr. Pap. d'Eur.* 245. *Roës. Ins.* iii. pl. 68, f. 5.
Noctua leucophæa, *Wien. Verz.* 82, 5. *Hübner. Samml. Eur. Schmett. Noct.* pl. 27, f. 80, 817. *Bork. Eur. Schmett.* iv. 408, 164. *Frey. Neu. Beit. Schmett.* iv. pl. 382; *Ent. Zeit. Stett.* ii. 94.
Bombyx fulminea, *Fabr. Sp. Ins.* ii. 205, 149; *Mant. Ins.* ii. 133, 210; *Ent. Syst.* iii. 1, 484, 241. *Oliv. Enc. Méth.* v. 101, 265.
Phalæna-Bombyx fulminea, *Gmel. ed. Syst. Nat.* i. 5, 2440, 577.
Bombyx vestigialis, *Esp. Schmett.* iii. pl. 53, f. 4, 8.
Bombyx ravida, *Esp. Schmett.* iv. pl. 145, f. 1.
Noctua Hadenæ leucophæa, *Meig. Handb.* 160, 32; *Syst. Besch.* iii. 106, 43, pl. 100, f. 1.
Hadenæ leucophæa, *Treit. Schmett. Eur.* v. 319, 6.
Heliophobus leucophæa, *Steph. Ill. Brit. Haust.* ii. 190, pl. 24.
Pachetra leucophæa, *Dup. Hist. Nat. Lép. Fr.* iii. 282, pl. 90. *Guén. Noct.* i. 177, 277. *Steph. Cat. Brit. Lep.* 97.
Luperina leucophæa, *Boisd. Ind. Meth.* 113, 865.
Mamestra leucophæa, *Hübner. Verz. Schmett.* 214, 2138.
Polia leucophæa, *Herr.-Schæff. Eur. Schmett.* ii. 252, 208.
a. England. From Mr. Stephens' collection.
b. England.
c, d. Europe. From M. Becker's collection.
e. Odessa. Presented by Dr. Dowler.
f—h. ———?

Subfam. 4. APAMIDES.

Apamides, *Guén. Noct.* i. 178.

A. Thorax non densissime hirtus

A. Alæ posticæ flavæ, marginatæ. - 1. THALPOPHILA, *Hübner*.

B. Alæ posticæ obscuræ, aut albidæ.

A. Palporum articulus 2us 3o plus quadruplo longior.

a. Alæ pallidæ. - - - 3. CALAMIA, *Hübner*.

b. Alæ obscuræ.

i. Thorax non lanuginosus. - 5. MAMESTRA, *Ochs.*ii. Thorax lanuginosus. - 12. AMPHIA, *Guén.*

B. Palporum articulus 2us 3o non quadruplo longior.

a. Palpi porrecti, aut subascendentes.

i. Alæ anticæ pallidæ. - 2. LUPERINA, *Boisd.*

ii. Alæ anticæ obscuræ.

* Alæ anticæ margine exteriori denticulato.

9. APAMEA, *Ochs.*

** Alæ anticæ margine exteriori non denticulato.

† Alæ anticæ margine exteriori non rotundato.

10. MIANA, *Steph.*

†† Alæ anticæ margine exteriori rotundato.

11. CELÆNA, *Steph.*

b. Palpi ascendentes.

i. Palporum articulus 3us 2i dimidio longior.

6. CONDICA, *Walk.*

ii. Palporum articulus 3us 2i dimidio non longior.

13. PERIGEA, *Guén.*

B. Thorax densissime hirtus. - -

4. CRYMODES, *Guén.*C. *Maris* abdomen valvis apicalibus longis, densissime lanuginosis.8. ERIOPYGA, *Guén.*D. Abdomen subtus densissime pilosum. - 7. DASYGASTER, *Guén.*

Genus 1. THALPOPHILA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, oblique ascendentes; articulus 3us cylindricus, 2i triente non brevior. Antennæ corporis dimidio paullo longiores. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcariibus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori perpaullo obliquo. *Mas.*—Antennæ serratæ. *Fæm.*—Antennæ simplices.

Cerigo, *Steph. Ill. Brit. Haust.* ii. 5; *Boisd.*; *Dup.*; *Guénée*,
Ann. Soc. Ent. Fr. vi. 363; *Noct.* i. 178.

Polia, p., *Treits.*; *Herr.-Schæff.*

Miselia, p., *Meig.*

Thalpophila, *Hübner. Verz. Schmett.* 208; *Steph. Cat. Brit. Lep.*
 61.

Body stout. Proboscis moderately long. Palpi stout, pilose, obliquely ascending; third joint cylindrical, about one-third of the length of the second. Antennæ a little more than half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight along the costa, rounded at the tips, very slightly oblique along the exterior border; second inferior vein rather nearer to the third than to the first; fourth moderately remote. *Male*.—Antennæ serrated. *Female*.—Antennæ simple.

1. THALPOPHILA CYTHEREA.

Cinereo-fusca; abdomen testaceum; alæ anticæ fuscae, margine
 exteriore pallidiore venis albis, annulis duobus discalibus
 lineisque transversis undulatis albidis nigro-fusco marginatis;
 posticæ pallide luteæ, margine lato fuscescentæ, ciliis albidis.

———, *Engr. Pap. d'Eur.* 430, a—d. *Harr. V. M.* 59.

Noctua Cytherea, *Fabr. Ent. Syst.* iii. 2, 57, 157. *Haw. Lep. Brit.*
 161, 6. *God. Hist. Nat. Lép. Fr.* ii. 147, pl. 57.

Phalæna Matura, *Hübner. Berl. Mag.* iii. 414.

Noctua texta, *Esp. Schmett.* iv. pl. 108, f. 6. *Bork. Eur. Schmett.*
 iv. 120, 48. *Hübner. Schmett. Eur. Noct.* pl. 23, 109; pl. 118,
 f. 547 (connexa, *Texte*).

Noctua prospicua, *Haw. Lep. Brit.* 161.

Polia texta, *Treit. Schmett.* v. 62, 20.

Noctua (Miselia) texta, *Meig. Syst. Besch.* iii. 129, 84, pl. 102,
 f. 10.

Cerigo texta, *Steph. Ill. Brit. Ent. Haust.* ii. 107.

Cerigo Cytherea, *Boisd. Ind. Méth.*, 101, 755. *Guén.* *Noct.* i. 179,
 278. *Westw. & H. Brit. Moths*, i. 169, pl. 21, f. 10.

Thalpophila texta, *Hübner. Verz. Schmett.* 208, 2078. *Steph. Cat.*
Brit. Lep. 61.

Polia Cytherea, *Herr.-Schæff. Eur. Schmett.* ii. 257, 225.

a—n. England. From Mr. Stephens' collection.

o—r. England.

s—u. Europe. From M. Becker's collection.

w. Europe. From Mr. Milne's collection.

Genus 2. LUPERINA.

Corpus robustum. Proboscis brevis. Palpi porrecti, pilosi, caput superantes; articulus 3us longi-conicus, 2i quadrante brevior. Antennæ simplices, corporis dimidio breviores. Abdomen alas posticas dimidio superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ sat angustæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriori subobliquo subdenticulato vix angulato.

Luperina, p., *Boisd. Ind. Méth.* 145; *Dup.*; *Guén.*

Sideridis, p., *Hübner. Verz. Schmett.* 232.

Dianthæcia, p., *Graslin.*

Polia, p., et Orthosia, p., *Herr.-Schæff.*

Body stout. Proboscis short. Palpi porrect, pilose, extending somewhat beyond the head; third joint elongate-conical, more than one-fourth of the length of the second. Antennæ simple, less than half the length of the body. Abdomen extending for half its length beyond the hind wings. Legs rather stout; hind tibiæ with four moderately long spurs. Wings rather narrow. Fore wings straight in front, somewhat rounded at the tips, slightly oblique and denticulated, and hardly angular along the exterior border; first, second and third inferior veins nearly contiguous at the base; fourth moderately remote.

1. LUPERINA LUTEAGO.

Cervina; thorax testaceo varius; abdomen testaceum; alæ anticæ basi posteriore, maculis variis fasciæque exteriori testaceis, guttis ciliaribus fuscis; posticæ testaceo-cinereæ, ciliis testaceis.

———, *Engr. Pap. d'Eur.* 372, a, b?

Noctua luteago, *Wien. Verz.* 8, 6. *Fabr. Mant. Ins.* ii. 160, 169;

Ent. Syst. iii. 2, 75, 216. *Hübner. Samml. Eur. Schmett.* 184.

Noctua lutea, *Bork. Eur. Schmett.* 296.

Noctua brunneago, *Esp. Schmett.* pl. 196, f. 2, 3.

Noctua olbiena, *Geyer, Samml. Eur. Schmett.* 829, 830.

Phalæna-Noctua luteago, *Gmel. ed. Syst. Nat.* i. 5, 2577, 1184.

Sideridis luteago, *Hübner. Verz. Schmett.* 232, 2330.

Gortyna luteago, *Treit. Schmett. Eur.* ii. 338.

Luperina luteago, *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 246, pl. 23,

f. 3, 4. *Boisd. Ind. Méth.* 145, 1169. *Guén. Ann. Soc. Ent.*

Fr. vi.; *Noct.* i. 181, 279.

Dianthæcia luteago, *Graslin, Ann. Soc. Ent. Fr.* xi. 313, pl. 13, f. 8—10.

Polia luteago, *Herr.-Schæff. Eur. Schmett.* ii. 262, 241.

a, b. Europe. From M. Becker's collection.

2. LUPERINA FERRAGO.

Ferrugineo-ochracea; *alæ anticæ fuscae pone lineam undulatam valde flexuosam, strigis duabus simplicibus, stigmatis reniformis margine tenui fusco.*

Luperina ferrago, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1837; *Faun. Volg.-Ural.* 276.

Noctua ferrago, *Frey. Neu. Beit. Schmett.* iv. 133, pl. 364.

Polia ferrago, *Herr.-Schæff. Eur. Schmett.* ii. 216, 105; ii. *Noct.* pl. 9, f. 41.

Luperina Calthago, *Boisd. Ind. Méth.* 143, 1162.

Luperina ferrago, *Guén. Noct.* i. 181, 280.

South Russia.

3. LUPERINA RUBELLA.

Cervina; *abdomen testaceum*; *alæ anticæ fascia obliqua diffusa ex parte obscuriore atomisque ferrugineis, punctis exterioribus in linea transversa nigricantibus*; *posticæ pallide testaceæ.*

Luperina rubella, *Dup. Hist. Nat. Lép. Fr. Suppl.* ii. 249, pl. 23, f. 1. *Boisd. Ind. Méth.* 114, 870. *Guén. Noct.* i. 182, 281.

Orthosia rubella, *Herr.-Schæff. Eur. Schmett.* ii. 204, 72; ii. *Noct.* pl. 84, f. 431, 432.

South France.

Genus 3. CALAMIA.

Viridi et albicolor. Corpus robustum. Proboscis mediocriter longa. Palpi validi, pilosi, subascendentes; 2us 3o quadruplo longior; 3us conicus. Antennæ simplices, graciles, corporis dimidio longiores. Abdomen alas posticas plus triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor vix longis. Alæ mediocriter latæ, apud costam rectæ, apice subrotundatæ, margine exteriore mediocriter obliquo.

Calamia, p., *Hübner. Verz. Schmett.* 240.

Xylina, p., *Treit.*

Mithymna, p., *Meig.; Herr.-Schæff.*

Luperina, p., *Boisd.; Dup.; Guén.*

Colour green and white. Body stout. Proboscis moderately long. Palpi stout, pilose, slightly ascending; third joint conical, about one-fourth of the length of the second. Antennæ simple, slender, more than half the length of the body. Abdomen extending for more than one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four hardly long spurs. Wings moderately broad. Fore wings straight in front, somewhat rounded at the tips, moderately oblique along the exterior border.

1. CALAMIA VIRENS.

Alba; caput thoraxque supra viridia; alæ anticæ supra virides, margine tenui maculisque duabus discalibus nonnunquam obsoletis albis.

———, *Engr. Pap. d'Eur.* 495, a—c.

Phalæna-Noctua virens, *Gmel. ed. Syst. Nat.* i. 5, 2561, 139.

Noctua virens, *Wien. Verz.* 85, B. 8. *Fabr. Mant. Ins.* ii. 173, 248; *Ent. Syst.* iii. 2, 103, 307. *Knock, Beit. Ins.* ii. pl. 1, f. 1. *Esp. Schmett.* iv. pl. 122, f. 1. *Bork. Eur. Schmett.* iv. 703, 310. *Hübner. Samml. Eur. Schmett. Noct.* pl. 48, f. 235.

Noctua (Mythimna) virens, *Meig. Handb.* 169, 53; *Syst. Besch.* iii. 154, 132, pl. 101, f. 12.

Xylina virens, *Treit. Schmett.* v. 2, 276, 16. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 104, f. 6.

Luperina virens, *Boisd. Ind. Méth.* 114, 877. *Guén. Noct.* i. 184, 286.

Calamia virens, *Hübner. Verz. Schmett.* 240, 2378.

Mythimna virens, *Herr.-Schæff. Eur. Schmett.* ii. 193, 36.

a. Europe. From M. Becker's collection.

Genus 4. CRYMODES.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, validi, pilosissimi; articulus 2us 3o quadruplo longior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam vix convexæ,

apice rotundatæ, margine exteriori subdenticulato subconvexo mediocriter obliquo.

Crymodes, Guén. Ind. 238; Noct. i. 284. Duponch.

Hadena, p., Boisd.; Zett.

Polia, p., Herr.-Schæff.

Body stout. Proboscis moderately long. Palpi porrect, stout, very pilose; third joint not more than one-fourth of the length of the second. Antennæ simple, more than half the length of the body. Abdomen extending for full one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings moderately broad. Fore wings hardly convex in front, rounded at the tips, slightly convex and denticulated, and moderately oblique along the fore part of the exterior border.

Europe.

1. CRYMODES GRÆNLANDICA.

Alæ anticæ cano nigroque variæ, strigis tribus dentatis distinctioribus albis, maculis ordinariis obsoletis; posticæ fusæ basi dilutiores.

Hadena Grænlantica, Zett. Ins. Lapp. 939, 9. Lefebv. Ann. Soc. Ent. Dup. Hist. Nat. Léop. Fr. Suppl. iii. 228, pl. 21. Boisd. Ind. Méth. 119, 935.

Polia Grænlantica, Herr.-Schæff. Schmett. Eur. ii. 274, 284, pl. 31, f. 151.

Crymodes Grænlantica, Guén. Noct. i. 185, 287.

Lapland. Iceland. Greenland.

a. Lapland. Presented by F. Walker, Esq.

2. CRYMODES FRIGIDA.

Alæ anticæ glauco nigroque variæ, maculis ordinariis fasciæque postica cinerascentibus; posticæ fusæ.

Hadena frigida, Zett. Ins. Lapp. 930, 7.

Sweden. Norway. Lapland.

3. CRYMODES BOREA.

Nigro-fusca; alæ anticæ apud discum plus minusve albido et flavescente variæ, venis albidis, ciliis albo-ochraceis; posticæ flavescente-cinereæ, ciliis flavescente-albis.

Hadena Borea, *Boisd. Gen. et Ind. Méth.* 119, 936.

Crymodes Borea, *Guén. Noct.* i. 186, 291.

Lapland. Arctic America.

4. CRYMODES POLI.

Ferruginea ; abdomen cinereum ; alæ anticæ venis albidis, fasciis undulatis maculisque reniformi et orbiculari subcinereis ex parte nigro marginatis ; posticæ cinereæ, fascia margineque lato fuscescentibus, ciliis albidis.

Polia cervina, *Herr.-Schæff. Eur. Schmett.* ii. 342.

Polia marmorata, *Herr.-Schæff. Eur. Schmett.* ii. pl. 451.

Crymodes Poli, *Guén. Noct.* i. 187, 292.

North Europe.

5. CRYMODES SOMMERI.

Alæ anticæ fusco cinereoque marmoratæ, strigis duabus dentatis nigris albo limbatis, maculis ordinariis cinerascentibus ; posticæ fulvo-cinereæ.

Hadena Sommeri, *Lefebvre, Ann. Soc. Ent. Fr.* v. 391, pl. 10, f. 1.
Boisd. Ind. Méth. 119, 934.

Crymodes Sommeri, *Guén. Ann. Soc. Ent. Fr.* vi. 238 ; *Noct.* i. 187, 293. *Dup. Hist. Nat. Léop. Fr. Suppl.* iii. 586, pl. 49, f. 1.

Iceland. Greenland.

North America.

6. CRYMODES EXULIS.

Alæ anticæ fusco cinereoque variæ, fascia media rufescente, maculis ordinariis cinereis, reniformi dilutiore, striga postica dentata fulva, fimbria fulvo-fusco intersecta ; posticæ fulvo-cinereæ, ciliis flavidis.

Hadena exulis, *Lefebvre, Ann. Soc. Ent. Fr.* v. 392, pl. 10, f. 2.
Boisd. Ind. Méth. 119, 938. *Dup. Hist. Nat. Léop. Fr. Suppl.* iii. 588, pl. 49, f. 2.

Crymodes exulis, *Guén. Ann. Soc. Ent. Fr.* vi. 238 ; *Noct.* i. 185, 288.

Labrador.

7. CRYMODES GELIDA.

C. Grœnlandica affinis, minor; thorax cinereo varius; alæ ciliis albis vix flavescens; anticæ pallide cinereæ, lateribus, lineis maculisque albidis, nigro minus marginatis, macula orbiculari plus rotundato.

Crymodes gelida, Guén. Noet. i. 186, 289.

Arctic America?

8. CRYMODES GELATA.

Alæ anticæ fusco cinereoque nebulosæ, strigis tribus dentatis nigro-fuscis, maculis ordinariis distincte albidis; posticæ fulvo-cinereæ, margine fusca, ciliis flavidis.

Hadena gelata, Lefebvre, Ann. Soc. Ent. Fr. v. 393, pl. 10, f. 3.
Boisd. Ind. Méth. 119, 937.

Crymodes gelata, Guén. Ann. Soc. Ent. Fr. vi. 238; Noet. i. 186, 290. Dup. Hist. Nat. Léop. Fr. Suppl. iii. 590, pl. 49, f. 3.

Hadena marmorata? Zett. Ins. Lapp. 937.

Polia gelata, Herr.-Schæff. Eur. Schmett. ii. 267, 264, pl. 86, f. 452, 453.

Europe? Labrador.

Genus 5. MAMESTRA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi, caput superantes; articulus 3us longi-conicus, 2i quadrante non longior. Antennæ corporis dimidio vix longiores. Abdomen cristatum, alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subrotundatæ, margine exteriori denticulato mediocriter obliquo. Mas.—Antennæ vix ciliatæ.

Chera, p., *Tholera*, p., *Hadena*, p., *Diataraxia*, p., *Barathra*, *Melanchra*, Hübn. Verz. Schmett.

Mamestra, p., et *Apamea*, p., Ochs.; Treit.; Steph.

Hadena, p., Treit.; Dup.

Mamestra et *Luperina*, p., Guén.

Agrotis, p., Curt.

Hama, p., Duponch.; Steph.

Charæas, p., Steph.

Graphiphora? p., Steph.

Hadena et Luperina, p., *Boisd.* ; *Dup.*

Aplecta, p., *Boisd.*

Polia, p., *Herr.-Schæff.*

Body stout. Proboscis moderately long. Palpi stout, porrect, pilose, extending somewhat beyond the head ; third joint elongate-conical, about one-fourth of the length of the second. Antennæ hardly more than half the length of the body. Abdomen crested, extending for one-third of its length beyond the hind wings. Legs stout ; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, somewhat rounded at the tips, denticulated and moderately oblique along the exterior border ; second inferior vein nearer to the third than to the first ; fourth hardly remote. *Male*.—Antennæ hardly ciliated.

Europe.

Group 1.

Statura sat magna. Abdomen subcristatum.

Size rather large. Abdomen slightly crested.

1. MAMESTRA CHENOPODIPHAGA.

Mas. *Alæ anticæ fusco-virescentes, linea externa angulata, angulis quatuor longioribus ; maculis ordinariis una conjunctis.*

Mamestra chenopodiphaga, *Boisd.* ; *Rambur, Ann. Soc. Ent. Fr.* i. 283, pl. 9, f. 7. *Frey. Neu. Beit. Schmett.* iii. pl. 209, f. 1. *Geyer, Samml. Eur. Schmett.* 831, 832. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 251, pl. 23, f. 5. *Guén. Ann. Soc. Ent. Fr.* vi. 245 ; *Noct.* i. 190, 295.

Aplecta chenopodiphaga, *Boisd. Ind. Méth.* 122, 969.

Polia chenopodiphaga, *Herr.-Schæff. Eur. Schmett.* ii. 264, 251.

South France. Corsica.

a, b. Europe. From M. Becker's collection.

2. MAMESTRA IMMUNDA.

Fusca ; abdomen cinereum ; alæ anticæ fasciis angulosis pallidioribus nigro-fusco marginatis, linea transversa exterior e guttis albidis, maculis reniformi et orbiculari bene determinatis illa extus albido marginata ; posticæ glauco-cinereæ, ciliis albidis.

Mamestra immunda, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842. *Faun. Volg-Ural.* 195. *Guén. Noct.* i. 190, 296.

Polia immunda, Herr.-Schæff. *Eur. Schmett.* ii. 266, 256, pl. 33, f. 161, 162.

South Russia.

3. MAMESTRA SERRATILINEA.

Pallide cinerea; thorax fasciis undulatis vix conspicuis obscurioribus; alæ anticæ lineis undulatis transversis annulisque discalibus obscurioribus guttis duabus apud annulum reniformem lineaque undulata exteriori albidis.

Mamestra serratilinea, Ochs. *Syst. Gloss.* 74, 8. *Treit. Schmett. Eur.* ii. 38. *Guén. Ann. Soc. Ent. Fr.* vi. 245; *Noct.* i. 191, 298.

Hadena serratilinea, Dup. *Hist. Nat. Lép. Fr.* iii. 430, pl. 99.

Aplecta serratilinea, Boisd. *Ind. Méth.* 122, 970.

Noctua Polyodon, Hübn. *Samml. Eur. Schmett. Noct.* f. 365.

Chera serratilinea, Hübn. *Verz. Schmett.* 211, 2111.

Polia serratilinea, Herr.-Schæff. *Schmett. Eur.* ii. 271, 274, pl. 77, f. 395.

Switzerland. Austria. Hungary.

a. Europe. From M. Becker's collection.

4. MAMESTRA ZETA.

M. serratilinea similis; macula reniformis signo ζ albo notata; fimbriæ latiores, cinereo albidoque variæ.

Polia Zeta, *Treit. Schmett. Eur.* ii. 33. *Herr.-Schæff. Eur. Schmett.* ii. 271, 273, pl. 81, f. 416.

Aplecta Zeta, Boisd. *Ind. Méth.* 122, 971. *Guén. Ann. Soc. Ent. Fr.* vi. 416, 238; *Noct.* i. 191, 299.

Austria.

5. MAMESTRA BISCHOFFII.

Cinerea aut glaucescens; alæ anticæ fasciis obscurioribus, fasciis undulatis maculisque reniformi et orbiculari testaceis ex parte nigro marginatis, linea transversa exteriori e guttis albidis; posticæ cinereæ, basi pallidiores, ciliis albidis.

Var.? *Alæ posticæ pallide cinereæ, lineis duabus margineque obscurioribus.*

Polia Bischoffii, Herr.-Schæff. *Eur. Schmett.* ii. 265, 255, pl. 85, f. 440; pl. 87, f. 449.

Mamestra Bischoffii, *Guén. Noct.* i. 191, 300.
Constantinople.

6. MAMESTRA PERNIX.

Cinerea ; abdomen rufescente-cinereum ; alæ anticæ fasciis undulatis fuscis canescente marginatis, linea transversa exterior e guttis albidis, lunula discali testacea ; posticæ nigro-cinereæ, basi rufescente-cinereæ, ciliis testaceis.

Noctua Pernix, *Geyer, Samml. Eur. Schmett.* 801. *Frey. Neu. Beit. Schmett.* iii. 57, pl. 282, f. 2, 3.

Luperina pernix, *Boisd. Ind. Méth.* 115, 889. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 189, pl. 18.

Mamestra pernix, *Guén. Ann. Soc. Ent. Fr.* vi. 238 ; *Nact.* i. 192, 301.

Hadena clandestina, *Boisd. Ind. Méth.* Ed. 1, 65.

Polia Pernix, *Herr.-Schæff. Eur. Schmett.* ii. 265, 253, pl. 11, f. 54.

Var. Mamestra rivalis, *Friv.*

Switzerland. Pyrenees. Turkey.

7. MAMESTRA BUGNIONI.

Luperina Bugnioni, *Boisd. Ind. Méth.* 115, 891.

Mamestra Bugnioni, *Guén. Noct.* i. 192, 302.

Switzerland.

8. MAMESTRA MAILLARDI.

Obscure cinerea ; abdomen cinerascens ; alæ anticæ albo conspersæ, nigro nebulosæ, guttis costalibus lunulaque discali albidis ; posticæ cinerascens.

Noctua Maillardi, *Geyer, Samml. Eur. Schmett.* 833.

Luperina Maillardi, *Boisd. Ind. Méth.* 890. *Dup. Hist. Nat. Lép. Fr. Suppl.* iii. 191, pl. 18.

Polia Maillardi, *Herr.-Schæff. Eur. Schmett.* ii. 271, 275, pl. 11, f. 55.

Mamestra Maillardi, *Guén. Ann. Soc. Ent. Fr.* vi. 238 ; *Noct.* i. 192, 303.

Switzerland.

a, b. Europe. From M. Becker's collection.

9. MAMESTRA ARCTICA.

Rubida; abdomen cervinum; alæ anticæ punctis variis fasciisque duabus diffusis nigro marginatis virescente albidis, fascia exteriori cervina testaceo marginata, macula discali testacea; posticæ cervinæ, albido ciliatæ.

Hadena arctica, *Boisd. Icones; Ind. Méth.* 120, 947.

Polia arctica, *Herr.-Schæff. Eur. Schmett.* ii. 272, 279, pl. 31, f. 155. *Guén. Ann. Soc. Ent. Fr. Ind.* 244; *Noct.* i. 193, 304.

Lapland. Siberia.

a, b. Scotland. From Mr. Stephens' collection.

c—i. Trenton Falls, New York. Presented by E. Doubleday, Esq.

k. Massachusetts. From Prof. Sheppard's collection.

l—o. Nova Scotia. From Lieut. Redman's collection.

p. Orilla, West Canada. From Mr. Bush's collection.

10. MAMESTRA RUBRIRENA.

Nigro-cinerea; abdomen cinereum; alæ anticæ guttis costalibus albidis, maculis reniformi et orbiculari nonnullisque minoribus ferrugineis, linea transversa exteriori undulata guttisque marginalibus testaceis; posticæ cinereæ.

Hadena rubrivena, *Treit. Schmett. Eur.* ii. 159.

Noctua rubrivena, *Frey. Beitr. Ges. Eur. Schmett.* pl. 98, f. 2. *Geyer, Samml. Eur. Schmett.* 826. *Boisd. Ind. Méth.* 120, 942.

Mamestra rubrivena, *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 193, 305.

Hadena Feisthamelii, *Boisd. Ann. Soc. Ent. Fr.* ii. 375, pl. 14, f. 1; *Icon. Léop. d'Eur.* pl. 84. *Dup. Hist. Nat. Léop. Fr. Suppl.* iii. 226, pl. 21.

Polia rubrivena, *Herr.-Schæff. Schmett. Eur.* ii. 276, 292, pl. 12, f. 57.

Switzerland. Hungary.

a. Europe. From M. Becker's collection.

11. MAMESTRA CESPITIS.

Nigricans ; abdomen cinereum ; alæ anticæ maculis reniformi et orbiculari lineisque transversis angulosis atris cinereo marginatis ; posticæ albidæ, cinereo marginatæ.

———, *Engr. Pap. d'Eur.* 459, a—c.

Noctua cespitis, *Wien. Verz.* 82, 2. *Fabr. Mant. Ins.* ii. 156, 148 ; *Ent. Syst.* iii. 2, 191. *Kléem, Beit. Ins. Gesch.* i. pl. 29, f. 1—10. *Bork. Eur. Schmett.* 163. *Hübner. Samml. Eur. Schmett.* 428.

Phalæna-Noctua cespitis, *Gmel. ed. Syst. Nat.* i. 5, 2543, 1035.

Hadena cespitis, *Treit. Schmett. Eur.* ii. 115. *Dup. Hist. Nat. Lép. Fr.* iv. 26, pl. 102.

Charæas cespitis, *Steph. Ill. Brit. Haust.* ii. 109. *Westw. & H. Brit. Moths*, i. 111, pl. 22, f. 4, 5.

Noctua Hordei, *Schrank, Faun. Boic.* ii. 1, 351.

Tholera cespitis, *Hübner. Verz. Schmett.* 215, 2139.

Var. Agrotis autumnalis, *Curt. Brit. Ent.* 165.

Var. Charæas confinis, *Steph. Ill. Brit. Ent. Haust.* ii. 109.

Luperina cespitis, *Boisd. Ind. Méth.* 113, 866. *Guén. Noct.* i. 284, 285.

Polia cespitis, *Herr.-Schæff. Eur. Schmett.* ii. 269, 268.

a. England. From Mr. Haworth's collection.

b—g. England. From Mr. Stephens' collection.

h, i. England.

j—k. Europe. From M. Becker's collection.

Group 2.

Abdomen subcristatum. Alæ anticæ margine exteriori integro, rotundato ; macula reniformis guttis exterioribus pallidis.

Abdomen slightly crested. Exterior border of the fore wings entire, rounded ; reniform marked exteriorly with one or several pale dots.

12. MAMESTRA ABJECTA.

Cinerea ; abdomen canum ; alæ anticæ lineis transversis undulatis incompletis canis ex parte nigro marginatis, gutta punctoque discalibus canis, strigis exterioribus lanceolatis nigris ; posticæ albidæ, margine cinereo.

Noctua abjecta, *Hübner. Samml. Eur. Schmett. Noct.* pl. 116, 539.

Luperina abjecta, *Boisd. Ind. Méth.* 114, 875.

Mamestra abjecta, Guén. *Ann. Soc. Ent. Fr.* vi. 238 ; *Noct.* i. 193, 306.

Noctua nigricans, View. *Schmett.* ii. 66, 101.

Mamestra nigricans, Treit. *Schmett. Eur.* ii. 141. *Steph. Ill. Brit. Haust.* iii. 193, pl. 24, f. 12. *Eversm. Faun. Volg-Ural.* 245.

Hadena abjecta, Hübn. *Verz. Schmett.* 216, 2154.

Var. *Noctua lunulina*, Haw. *Lep. Brit.* 192.

Graphiphora? *lunulina*, Steph. *Ill. Brit. Ent. Haust.* ii. 130.

Polia abjecta, Herr.-Schæff. *Eur. Schmett.* ii. 270, 271.

Var. *Luperina Fribolus*. Boisd. *Icon.* pl. 84, f. 4.

Noctua nigricans, Frey. iv. 35, pl. 311.

Europe.

a. England.

Var. *Nigro-cinerea*; abdomen cinereum; alæ anticæ maculis reniformi et orbiculari lineisque transversis undulatis nigris, his cinereo marginatis, strigis exterioribus lanceolatis nigris; posticæ cineræ, margine obscuriore. Mas.—Abdomen rufescente-cinereum.

Canada.

a, b. New York. Presented by E. Doubleday, Esq.

13. MAMESTRA ANCEPS.

Pallide cervina; abdomen albido-testaceum; alæ anticæ annulis reniformi et orbiculari lineisque transversis undulatis albidis aut testaceis fusco marginatis, lineolis exterioribus lunulisque marginalibus fuscis; posticæ albidæ, margine fuscescente.

Var. *Fusco-ferruginea*; abdomen et alæ posticæ fusco-cinerea; alæ anticæ annulis lineisque pallidioribus nigro marginatis.

Noctua anceps, Hübn. *Samml. Eur. Schmett. Noct.* pl. 102, f. 484. *Wien. Verz.* 22?

Mamestra anceps, Guén. *Noct.* i. 195, 309.

Noctua sordida. Bork. *Eur. Schmett.* iv. 378, 239.

Noctua contigua, Haw. *Lep. Brit.* 192, 91.

Apamea infesta, Ochs. *Schmett. Eur.* iv. 76. *Treit. Schmett.* v. 2, 112.

Luperina infesta, Boisd. *Ind. Méth.* 114, 872. *Dup. Hist. Nat. Lép. Fr.* iv. 29, pl. 102, f. 2, 6. *Steph. Ill. Brit. Ent. Haust.* iii. 4. *Westw. & H. Brit. Moths*, i. 170, pl. 35, f. 6.

Polia infesta, Herr.-Schæff. Schmett. Eur. ii. 273, 280.

Diataraxia aliena, Hübn. Verz. Schmett. 219.

Var. *Luperina Renardii*, Boisd. Ind. Méth. 114, 871.

a—k. England. From Mr. Stephens' collection.

l—o. England.

p—r. Europe. From M. Becker's collection.

s—v. ——— ?

14. MAMESTRA ALBICOLON.

Cinereo-fusca ; abdomen cinereum ; alæ anticæ strigulis transversis nigricantibus, puncto guttaque arcuata discalibus albis ; posticæ cinereæ, margine fusco.

Noctua albicolon, Sepp, Ins. ii. pl. 1, f. 1—9. Hübn. Samml. Eur. Schmett. Noct. pl. 117, f. 542, 543.

Barathra albicolon, Hübn. Verz. Schmett. 218, 2185.

Luperina albicolon, Boisd. Ind. Méth. 114, 873.

Mamestra albicolon, Treit. Schmett. Eur. ii. 147. Dup. Hist. Nat.

Lép. Fr. iv. 272, pl. 117. Guén. Ann. Soc. Ent. Fr. vi. 238 ;

Noct. i. 196, 310. Steph. Ill. Brit. Ent. Haust. ii. 195, pl. 24, f. 3.

Polia albicolon, Herr.-Schæff. Eur. Schmett. ii. 270, 272.

a—d. England. From Mr. Stephens' collection.

e, f. England.

g, h. Europe. From M. Becker's collection.

15. MAMESTRA LEINERI.

Lateritio ferruginea ; abdomen flavescence-cinereum ; alæ anticæ stigmatate reniformi intus albo-cincto, signaturis pallidis ; posticæ flavescence-cinereæ.

Noctua Leineri, Frey. Neu. Beit. Schmett. ii. 145, pl. 184, f. 3.

Luperina Leineri, Boisd. Ind. Méth. 114, 882.

Polia Leineri, Herr.-Schæff. Eur. Schmett. ii. 272, 277, pl. 21, f. 102.

Mamestra Leineri, Guén. Ann. Soc. Ent. Fr. vi. 258 ; Noct. i. 196 311.

Hungary. South Russia. Mount Balkan.

16. MAMESTRA CERVINA.

Lateritio-ferruginea; abdomen cinereum; alæ anticæ nigro conspersæ, maculis reniformi et orbiculari, fascia exteriori strigisque marginalibus testaceis, striga discali clavata alba; posticæ nigro-cinereæ, basi pallidiores.

Mamestra cervina, *Eversm. Bull. Soc. Imp. Nat. Mosc.* 1842, 111, 546, 3; *Faun. Volg-Ural.* 246. *Guén. Noct.* i. 197, 312.

Polia cervina, *Herr.-Schæff. Eur. Schmett.* ii. 272, pl. 33, f. 163, 164.

Sarepta.

Group 3.

Abdomen maris et fœm. valde cristatum. Alæ anticæ lituris bene determinatis; macula reniformis tota aut fere tota pallida.

Abdomen of the male and of the female distinctly crested. Fore wings with distinct marks; reniform spot wholly, or almost wholly pale.

17. MAMESTRA FURVA.

Cinereo-fusca; abdomen cinereum; alæ anticæ fasciis angulosis pallidioribus nigricante marginatis, linea transversa angulosa exteriori albida, macula reniformi albido marginata; posticæ cinereæ margine, lata fuscescente.

Noctua furva, *Wien. Verz.* 81, 20. *Hübner. Samml. Eur. Schmett. Noct.* f. 407.

Luperina furva, *Boisd. Ind. Méth.* 114, 876.

Mamestra furva, *Treit. Schmett. Eur.* ii. 154. *Dup. Hist. Nat. Léop. Fr. Suppl.* iii. 276, pl. 25. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct.* i. 197, 313.

Noctua Freyeri, *Frey. Neu. Beit. Schmett.* ii. 107, pl. 159.

Tholera furva, *Hübner. Verz. Schmett.* 215, 2140.

Mamestra anceps? *Westw. & H. Brit. Moths*, i. 175, pl. 36, f. 15.

Hama furva, *Steph. Cat. Brit. Lep.* 90.

Var. Mamestra furva, *Eversm. Faun. Volg-Ural.* 247.

Mamestra infernalis, *Eversm. Bull. Soc. Imp. Mosc.* 1842.

Var. Mamestra silvicola, *Eversm. Bull. Soc. Imp. Mosc.* 1842; *Faun. Volg-Ural.* 247.

Polia furva, *Herr.-Schæff. Schmett. Eur.* ii. 276, 291, pl. 58, f. 290.

a. England. Presented by — Dyson, Esq.

b—d. England. From Mr. Stephens' collection.

e, f. England.

18. MAMESTRA BRASSICÆ.

Fusca ; abdomen pallidissime fuscens, crista fusca ; alæ anticæ annulis discalibus lineisque undulatis transversis nigris, litura discali fasciaque tenui submarginali albis nigro marginatis ; posticæ cinereo-fuscæ.

- , *Göed. Ins.* 3, pl. 5. *Merian, Ins. Eur.* pl. 81.
Frisch. Ins. 10, pl. 16. *Albin, Nat. Hist. Engl. Ins.* pl. 28,
 23 ; pl. 29, 45. *Roës. Ins. Bel.* i. pl. 29. *Réaum. Ins.* i. pl.
 40, 41. *Deg. Ins.* ii. 438. *Engr. Pap. d'Eur.* 456, a—c ;
 e, f. 161.
- Phalæna-Noctua Brassicæ, *Linn. Syst. Nat.* i. 516 ; *Faun. Suec.*
 1205. *Gmel. ed. Syst. Nat.* i. 5, 2542, 163.
- Noctua Brassicæ, *Wien. Verz.* 81, 21. *Fabr. Ent Syst.* iii. 2, 67,
 189. *Bork. Eur. Schmett.* iv. 584, 242. *Sepp. Ins.* ii. pl. 1.
Esp. Schmett. iv. pl. 159, f. 1—6. *Hübner. Eur. Schmett. Noct.*
 pl. 18, f. 88. *Haw. Lep. Brit.* 191.
- Mamestra Brassicæ, *Treit. Schmett.* v. 2, 150, 9. *Dup. Hist. Nat.*
Lep. Fr. vii. 149, pl. 102, f. 5. *Steph. Ill. Brit. Ent. Haust.*
 ii. 194. *Westw. & H. Brit. Moths,* i. 174, pl. 36, f. 8, 9.
Guén. Noct. i. 198, 314.
- Hadena Brassicæ, *Boisd. Ind. Méth.* 118, 915.
- Polia Brassicæ, *Herr.-Schæff. Eur. Schmett.* ii. 270, 269.
- Noctua (Mamestra) Brassicæ, *Meig. Handb.* 166, 45 ; *Syst. Besch.*
 iii. 140, 106, pl. 104, f. 11.
- Barathra Brassicæ, *Hübner. Verz. Schmett.* 218, 2184.
- Noctua albidilinea, *Haw. Lep. Brit.* 191.
- Mamestra albidilinea, *Steph. Ill. Brit. Ent. Haust.* ii. 195.
- a—m. England. From Mr. Stephens' collection.
- n—r. England.
- s—u. Europe. From M. Becker's collection.
- w. Orilla, West Canada. From Mr. Bush's collection.

19. MAMESTRA PERSICARIÆ.

Nigricans ; abdomen cinerascens, crista nigricante ; alæ anticæ punctis nonnullis albis, lineis transversis undulatis fulvis nigro marginatis, macula discali alba luteo signata ; posticæ albidæ, margine lato guttaque discali cinereis.

- , *Albin, Nat. Hist. Engl. Ins.* pl. 77, a—d. *Ammir.*
Ins. pl. 157. *Geoff. Ins. Par.* ii. 157. *Roës. Ins. Bel.* i. pl.
 30. *Engr. Pap. d'Eur.* 335, a—e.

Phalæna-Noctua Persicariæ, *Linn. Faun. Suec.* 1208. *Gmel. ed. Syst. Nat.* i. 5, 2562, 142.

Noctua Persicariæ, *Wien. Verz.* 71, 8. *Fabr. Sp. Ins.* ii. 236, 132; *Mant. Ins.* ii. 177, 268; *Ent. Syst.* iii. 2, 111, 335. *Esp. Schmett.* iv. pl. 129, f. 1, 2. *Sepp, Ins.* ii. pl. 10. *Donov. Nat. Hist. Brit. Ins.* ix. pl. 317. *Bork. Eur. Schmett.* iv. 162, 66. *Hübner. Samml. Eur. Schmett. Noct.* pl. 13, f. 64. *Haw. Lep. Brit.* 88.

Noctua (Mamestra) Persicariæ, *Meig. Handb.* 166, 46; *Syst. Besch.* iii. 138, 102, pl. 104, f. 4.

Melanchra Persicariæ, *Hübner. Verz. Schmett.* 118, 913.

Mamestra Persicariæ, *Treit. Schmett.* v. 2, 156, 11. *Dup. Hist. Nat. Lép. Fr.* vii. pl. 102, f. 4. *Steph. Ill. Brit. Ent. Haust.* ii. 196. *Guén. Noct.* i. 199, 315.

Var. Noctua accipitrina, *Esp. Schmett.* pl. 129, f. 4.

Hadena Persicariæ, *Boisd. Ind. Méth.* 118, 913.

Polia Persicariæ, *Herr.-Schæff. Schmett. Eur.* ii. 275, 288.

a—q. England. From Mr. Stephens' collection.

r—u. England.

x—aa. Europe. From M. Becker's collection.

North America:

Group 1.

Like the second European group.

20. MAMESTRA IMPULSA.

Nigra; abdomen cinereum; alæ anticæ annulis reniformi et orbiculari lineisque transversis undulatis incompletis atris, gutta discali punctisque exterioribus nonnunquam vix conspicuis testaceis; posticæ pallide cinereæ, lineis duabus discalibus abbreviatis margineque lato obscure cinereis.

Mamestra impulsæ, *Guén. Noct.* i. 194, 307.

a—c. Trenton Falls, New York. Presented by E. Doubleday Esq.

21. MAMESTRA PASSER.

Cinereo-fusca; abdomen cinereum; alæ anticæ annulis reniformi et orbiculari incompletis, striga postica, lineolis exterioribus nonnunquam obsoletis guttisque marginalibus nigris; posticæ cinereæ.

Mamestra Passer, *Guén. Noct.* i. 195, 308.

a, b. New York. Presented by E. Doubleday, Esq.

22. MAMESTRA DUBITANS.

Mas et fœm. *Ferruginea; abdomen cinereum, pilis apicalibus cervinis aut rufescentibus; alæ anticæ testaceo subnotatæ, apud venas albido conspersæ, lineis transversis fuscis, guttis costalibus albis, maculis reniformi et orbiculari fusco marginatis testaceo variis; posticæ cinereæ.*

Male and female. Ferruginous. Abdomen cinereous, with fawn-coloured or reddish hairs at the tip. Fore wings with transverse brown lines, with some slight testaceous marks, with some whitish speckles on the veins, and with some white dots near the tip of the costa; reniform spot and orbicular spot with brown borders, the former mostly testaceous. Hind wings cinereous, paler at the base. *Var.* Orbicular spot partly testaceous. Length of the body 7—8 lines; of the wings 16—18 lines.

a—c. Trenton Falls, New York. Presented by E. Doubleday, Esq.
d—f. Nova Scotia. From Lieut. Redman's collection.

23. MAMESTRA ORDINARIA.

Mas et fœm. *Cinerea; abdomen canum; alæ anticæ lineis transversis undulatis nigricantibus plus minusve cano marginatis, guttis costalibus albis, lunulis marginalibus nigricantibus, maculis reniformi et orbiculari ex parte albo marginatis; posticæ cinereæ, marginibus fuscescentibus.*

Male and female. Cinereous. Abdomen hoary. Fore wings with transverse undulating blackish lines, whose borders are more or less hoary; some white dots towards the tip of the costa; marginal lunules black or dark brown; reniform spot and orbicular spot occasionally partly bordered with white. Hind wings cinereous, with brownish borders and whitish ciliæ. *Male.*—Fore wings with incomplete cinereous-brown bands, or almost wholly dark cinereous-brown. Length of the body 7—8 lines; of the wings 18—20 lines.

a—f. Trenton Falls New York. Presented by E. Doubleday, Esq.

24. MAMESTRA CONTENTA.

Fusca aut cinerea; thorax fasciis indistinctis obscurioribus; abdomen cinereum; alæ anticæ lineis transversis angulosis pallidioribus nigro aut fusco marginatis, maculis reniformi et orbiculari magnis distinctis, guttis costalibus albis, lunulis marginalibus nigris; posticæ cinereæ, fusco marginatæ, ciliis albidis.

Brown or cinereous. Thorax with indistinct darker bands. Abdomen cinereous. Fore wings with transverse angulose paler lines, which have blackish or brownish borders; reniform spot and orbicular spot large, distinct, their borders like the transverse lines in colour; some white dots towards the tip of the costa, and a marginal row of black lunules. Hind wings cinereous, with brownish borders and whitish ciliæ. Length of the body 7 lines; of the wings 17 lines.

a—d. Nova Scotia. From Lieut. Redman's collection.

25. MAMESTRA UNICOLOR.

Fœm. Murina; abdomen cinereum; alæ anticæ lituris costalibus et nonnunquam basalibus nigris, maculis reniformi et orbiculari non bene determinatis; posticæ albidæ, cinereo marginatæ.

Female. Mouse-colour. Abdomen cinereous. Fore wings with some black costal marks, and a few black basal marks, the latter sometimes obsolete; reniform and orbicular ringlets variable as to shape, and more or less incomplete. Hind wings whitish, with cinereous borders. Length of the body 6—7 lines; of the wings 16—18 lines.

This may be the female of *M. Passer*.

a—d. Trenton Falls, New York. Presented by E. Doubleday, Esq.

e. St. Martin's Falls, Albany River, Hudson's Bay. Presented by G. Barnston, Esq.

f—h. Nova Scotia. From Lieut. Redman's collection.

26. MAMESTRA INSULSA.

Fœm. *Obscure ferrugineo-fusco; abdomen fusco-cinereum; alæ anticæ lituris basalibus et costalibus nigris; lineis transversis undulatis duplicatis nigris ex parte testaceo marginatis, linea exteriori transversa undulata incompleta testacea, maculis reniformi et orbiculari magnis ex parte testaceis; posticæ cinereæ, marginibus fuscis.*

Female. Dark ferruginous-brown. Abdomen brownish cinereous. Fore wings with black marks at the base and along the costa, and with transverse undulating black double lines, which are partly bordered with testaceous; an exterior incomplete transverse undulating testaceous line; reniform spot and orbicular spot large, partly testaceous, the latter somewhat oval. Hind wings cinereous, with brown borders, and pale cinereous ciliæ. Length of the body 7 lines; of the wings 16 lines.

a. Orilla, West Canada. From Mr. Bush's collection.

Group 2.

Like the third European group.

27. MAMESTRA ADJUNCTA.

Mas et fœm. *Cinereo-nigricans; abdomen cinereum; alæ anticæ litura basali, annulis reniformi et orbiculari fasciæque angulosa submarginali albis; posticæ pallide cinereæ, lineis duabus angulosis margineque fusco-cinereis.*

Mamestra adjuncta (Boisd. MSS.), Guén. Noct. i. 199, 315.

a, b. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Mexico:

Group 1.

Like the third European group.

28. MAMESTRA CONFIGURATA.

Mas. *Fusco-cervina; thorax nigro fasciatus; abdomen nigro cristatum; alæ anticæ nigricante variæ, lituris basalibus et costalibus, lineis transversis incompletis, maculis discalibus lunulisque marginalibus nigris, maculis albo notatis, linea exteriori transversa undulata alba; posticæ albæ, marginibus latis fuscescentibus.*

Male. Brownish fawn-colour. Thorax with black bands. Abdomen with black crests. Fore wings here and there blackish; costal and basal marks, some imperfect transverse lines, reniform and orbicular ringlets, and another ringlet behind the reniform one, and marginal lunules black; some white marks on the ringlets, and a white transverse undulating exterior line. Hind wings whitish, with broad brownish borders. Length of the body $5\frac{1}{2}$ lines; of the wings 16 lines.

a. Mexico. Presented by E. Doubleday, Esq.

South America.

Group 1.

Like the first European group.

29. MAMESTRA CALIDIPIES.

Pectus, abdomen basi pedesque longissime et densissime hirta; alæ anticæ testaceo-cinereæ, fusco et rufescente conspersæ, ciliis linea nigricante divisis; posticæ flavescence-albæ, margine lato nigricante.

Mamestra calidipes, Guén. Noct. i. 189, 294.

Brazil.

30. MAMESTRA DECOLORA.

Alæ anticæ pallide testaceo-cinereæ, lineis maculisque pallidioribus, macula orbiculari parva rotunda, guttis marginalibus obscurioribus, ciliis longis densis; posticæ sordide albidæ, margine lato cinereo.

Mamestra decolora, Guén. Noct. i. 190, 297.

Colombia.

31. MAMESTRA CRISTA.

Ferrugineo-fusca; thorax et alæ anticæ subpurpurascentia; abdomen fusco-cinereum; tarsi testaceo fasciati; alæ anticæ lineis duabus transversis indistinctis undulatis testaceis, guttis costalibus albido-testaceis, gutta basali punctisque marginalibus albidis, maculis reniformi et orbiculari testaceis nigro marginatis; posticæ fuscescentes, basi cinereæ.

Noctua crista, Morritz, MSS.

Ferruginous-brown. Thorax and fore wings with a slight purplish tinge. Abdomen brownish cinereous. Tarsi with testaceous bands. Fore wings with two indistinct undulating dull testaceous transverse lines, with some whitish testaceous dots along the costa, with a whitish dot at the base, and with whitish marginal points; a testaceous dot at half the distance from the base to the orbicular spot, which is small and oblong; reniform spot large, testaceous, with a black border like the other. Hind wings brownish, cinereous towards the base. Length of the body 7 lines; of the wings 18 lines.

Venezuela. In Mr. Saunders' collection.

32. MAMESTRA INDUCTA.

Cinerea; caput et thorax anticus obscuriora; tarsi testaceo fasciati; alæ anticæ lineis transversis undulatis canis fusco marginatis, lituris costalibus et lunulis marginalibus nigris, maculis orbiculari et reniformi distinctis canis nigro marginatis; posticæ pallide cinereæ, marginibus fuscescentibus, ciliis albidis.

Cinereous. Head and fore part of the thorax darker. Tarsi with testaceous bands. Fore wings with transverse undulating hoary brown-bordered lines; costal marks and marginal lunules black; orbicular spot and reniform spot distinct, hoary, with blackish borders, the former large and nearly round. Hind wings pale cinereous, with brownish borders; ciliæ whitish. Length of the body 7 lines; of the wings 18 lines.

a. Venezuela. From Mr. Dyson's collection.

33. MAMESTRA? TESSELLATA.

Cinereo-nigra; abdomen pallide cinereum; alæ anticæ lineis transversis nigris; posticæ pallide cinereæ, margine nigro-cinereo, fascia strigaeque postica albidis.

Phalæna-Noctua tessellata, Anon. Ins. Surin. pl. 77.

Surinam.

Asia.

34. MAMESTRA INFAUSTA.

Nigricans, cinereo conspersa; alæ anticæ nigro-fuscæ, lineis transversis undulatis atris, maculis reniformi et orbiculari indistinctis ex parte cervino marginatis, lituris nonnullis exterioribus cervinis; posticæ fuscæ.

Blackish, sprinkled with cinereous. Fore wings blackish brown, with deep black transverse undulating lines; reniform and orbicular spots indistinct; part of their borders, and some exterior and submarginal marks dull fawn-colour. Hind wings brown. Length of the body 8 lines; of the wings 20 lines.

a. Silhet. From Mr. Argent's collection.

Australia.

Group 1.

Abdomen valde cristatum. Alæ anticæ margine exteriori denticulato; posticæ marginibus nigris.

Abdomen distinctly crested. Fore wings with the exterior border denticulated. Hind wings with blackish borders.

35. MAMESTRA SEPULTRIX.

Nigricans, cinereo conspersæ; abdomen nigro-cinereum, basi pallide cinereum; alæ anticæ lineis transversis undulatis lunulisque marginalibus atris, lineolis nonnullis luteis, maculis reniformi et orbiculari luteo marginatis, illa albido signata; posticæ basi canescentes.

Var. Alæ anticæ magis cinerascens, lineolis nullis luteis, macula exteriori testacea, maculis reniformi et orbiculari nigro marginatis.

Mamestra sepultrix, Guén. Noct. i. 200, 317.

a. Tasmania. Presented by Morton Allport, Esq.

36. MAMESTRA NIGERRIMA.

Nigra; abdomen nigricans basi albidum, aut albidum crista nigra; tarsi albo annulati; alæ anticæ lineis transversis angulosis strigisque lanceolatis exterioribus atris, litura discali alba aut lutea nonnunquam obsoleta; posticæ albæ, margine latissimo nigricante.

Mamestra nigerrima, Guén. Noct. i. 200, 318.

Australia.

- a, b.* Tasmania. Presented by Morton Allport, Esq.
c. Tasmania. From Mr. A. J. Smith's collection.
d. Tasmania. Presented by the Entomological Club.
e. Sydney. Presented by E. Doubleday, Esq.
f. Australia. Presented by the late Earl of Derby.
g. Australia. Presented by Capt. Gray.
h. ———?

37. MAMESTRA ATERRIMA.

Fœm. *Atra*; abdomen nigro-cinereum, atra cristatum; tarsi albido fasciati; alæ anticæ breviusculæ, latiusculæ, subglaucescentes, lineis nonnullis transversis subundulatis atris; posticæ nigro-cinereæ, margine antico fasciisque duabus albidis, linea atra angulosa submarginali.

Female. Deep black. Abdomen blackish cinereous, with a deep black crest. Tarsi with whitish bands. Fore wings rather short and broad, with a slight glaucous tinge, which is interrupted by several deep black slightly undulating transverse lines. Hind wings blackish cinereous, whitish in front, and with two whitish bands, the exterior one very incomplete; a deep black zigzag submarginal line. Wings beneath cinereous, with a narrow white band, and with a broad exterior black band, which is much darker in the hind wings than in the fore wings. Length of the body 6 lines; of the wings 14 lines.

a. Australia. From Mr. Argent's collection.

38. MAMESTRA PROLIFERA.

Fœm. *Ferrugineo-fusca*; abdomen cinereum; alæ anticæ guttis costalibus punctisque marginalibus testaceis, maculis reniformi et orbiculari indistinctis, macula flava guttaque testacea apud maculam reniformem; posticæ fusco-cinereæ.

Female. Dark ferruginous-brown. Abdomen cinereous. Fore wings with some testaceous costal dots and some testaceous marginal points; reniform spot and orbicular spot indistinct, the former containing an oblong transverse pale yellow spot, in front of which there is a testaceous dot. Hind wings brownish cinereous. Length of the body 6 lines; of the wings 16 lines.

New South Wales. In Mr. Saunders' collection.

This species much resembles *M. nigerrima*, and, like it, is as nearly allied to *Apamea* as to *Mamestra*.

39. MAMESTRA IGNOBILIS.

Fœm. *Cinerea; caput albidum; palpi apice albid; thorax et alæ anticæ fusco conspersa; hæ lineis transversis undulatis aut angulosis fuscis; posticæ basi pallidiores.*

Female. Cinereous. Head whitish. Palpi with whitish tips. Thorax and fore wings sprinkled with brown. Fore wings with brown transverse undulating or zigzag lines. Hind wings paler towards the base. Length of the body 6 lines; of the wings 16 lines.

a. New Holland. Presented by Major-General Hardwicke.

New Zealand.

40. MAMESTRA COMMA.

Fœm. *Nigro-fusca; abdomen cinereum; alæ anticæ lineis transversis angulosis subobsoletis nigris, macula orbiculari parva rotunda testacea nigro marginata, reniformi ex parte testacea strigaeque alba attenuata conjunctis; posticæ cinereo-fuscæ, ciliis pallidioribus.*

Female. Blackish brown. Abdomen cinereous. Fore wings with very indistinct zigzag transverse black lines; orbicular spot small, round, testaceous, bordered with black; reniform spot partly testaceous, partly covered by a white mark, which is curved and attenuated at one end. Hind wings cinereous-brown, with paler ciliæ. Length of the body 6 lines; of the wings 15 lines.

a. New Zealand. From Mr. Churton's collection.

Genus 6. CONDICA.

Fœm. Corpus robustum. Proboscis mediocriter longa. Palpi ad verticem ascendentes; articulus 3us cylindricus, 2i dimidio fere longior. Antennæ simplices, corporis dimidio longiores. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor longissimis. Alæ mediocriter latæ, apud costam rectæ, apice rotundatæ, margine exteriori vix obliquo aut denticulato.

Female. Body stout. Proboscis moderately long. Palpi ascending to the vertex; third joint cylindrical, full half the length of the second. Antennæ simple, more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs stout; hind tibiæ with four very long spurs. Wings moderately

broad. Fore wings straight in front, somewhat rounded at the tips, hardly oblique or denticulated along the exterior border; first, second and third inferior veins contiguous at the base; fourth moderately remote.

This species, as regards the palpi, approaches the second group of *Noctuities*, but in other characters is closely allied to *Mamestra*, and the species here described much resembles *M. arctica*.

1. CONDICA PALPALIS.

Mas. *Cana; caput ferrugineum; thorax antice ferrugineus, postice ferruginea conspersus; abdomen fusco-cinereum, subcristatum; alæ anticæ ferruginæ, cano conspersæ, margine interiore maculisque reniformi, orbiculari et marginali canis, ciliis subtestaceis ferrugineo conspersis; posticæ pallide fuscae ciliis albidis.*

Male. Hoary. Head and fore part of the thorax ferruginous; hinder part of the latter with ferruginous specks. Abdomen brownish cinereous, slightly crested. Fore wings ferruginous, mostly hoary along the interior border, with a hoary spot on the exterior border, and with some hoary speckles elsewhere; the discal ringlets also hoary; ciliæ slightly testaceous, with ferruginous speckles. Hind wings pale brown, with whitish ciliæ. Length of the body 7 lines; of the wings 16 lines.

a ———? From Mr. Children's collection.

Genus 7. DASYGASTER.

Corpus robustum. Proboscis mediocriter longa. Palpi porrecti, pilosi, caput paullo superantes; articulus 3us cylindricus, 2i triente non brevior. Antennæ corporis dimidio multo longiores. Abdomen latum, plus minusve cristatum, subtus pilosissimum. Pedes pilosi, breviusculi; tibiæ posticæ calcaribus quatuor breviusculis. Alæ mediocriter latæ; anticæ apud costam vix convexæ, apice subangulatæ, margine exteriori subobliquo subrotundato.

Dasygaster, Guén. Noct. i. 201.

Body stout. Proboscis moderately long. Palpi porrect, pilose, extending a little beyond the head; third joint cylindrical, about one-third of the length of the second. Antennæ much more than half the length of the body. Abdomen broad, more or less crested, very hairy beneath. Legs pilose, rather short; hind tibiæ with four

rather short spurs. Wings moderately broad. Fore wings hardly convex in front, slightly angular at the tips; exterior border slightly oblique and slightly rounded; first, second and third inferior veins approximate; fourth moderately remote. *Male*.—Antennæ stout, setose-crenulate.

1. DASYGASTER HOLLANDIÆ.

Murina; abdomen cinereum; alæ anticæ annulis reniformi et orbiculari lineisque transversis incompletis angulosis albidis nigricante marginatis; posticæ fusco-cinereæ, ciliis albidis, subtus albidæ gutta discali margineque latissimo fuscis.

Dasygaster Hollandiæ, Guén. Noct. i. 201, 319.

Australia.

2. DASYGASTER LEUCANIOIDES.

Var.? Rufescens; palpi cinerei; alæ anticæ venis cinereis albo punctatis, gutta alba apud venæ medianæ apicem bene determinata; posticæ fuscae, ciliis pallidis, subtus cinereæ fusco conspersæ et marginatæ.

Dasygaster leucanioides, Guén. Noct. i. 202, 320.

Male. Reddish. Antennæ and palpi pale cinereous, the former stout, crenulate. Veins of the fore wings dark gray, with white marks, of which, the most distinct one is at the tip of the median vein. Hind wings brown, with paler ciliæ; under side pale cinereous, sprinkled with brown and with dark brown borders. Length of the body 7 lines; of the wings 16 lines.

a. Tasmania. Presented by Morton Allport, Esq.

3. DASYGASTER EPUNDOIDES.

Abdomen valde cristatum; alæ anticæ obscure nigræ, cinereo conspersæ, strigis lanceolatis atris guttisque flavo-albis submarginalibus, gutta apud venam medianam flavo-alba, margine exteriori denticulato; posticæ nigricantes, ciliis cinereis.

Dasygaster epundoides, Guén. Noct. i. 202, 321.

Australia.

4. DASYGASTER PUNCTIVENA.

Cinereo-nigra; abdomen cinereum; alæ anticæ lineis transversis angulosis strigisque exterioribus nigris, lituris basalibus fasciæque exteriore guttulari testaceis, maculis reniformi et orbiculari indistinctis, illa ex parte testacea; posticæ fuscae, antice cinereæ, ciliis ex parte albidæ.

Cinereous-black. Abdomen cinereous. Fore wings with black zigzag transverse lines, and with exterior black streaks; some testaceous marks towards the base, and an exterior band of testaceous dots; reniform spot and orbicular spot indistinct, the former partly testaceous. Hind wings brown, cinereous in front; ciliæ partly whitish. Length of the body 6 lines; of the wings 16 lines.

a. Tasmania. Presented by W. W. Saunders, Esq.

Genus 8. ERIOPYGA.

Mas. Corpus vix robustum. Frons rotundata. Proboscis breviuscula. Palpi ascendentes; articulus 2us subrectus; 3us brevissimus. Antennæ sat longæ, pubescentes. Thorax hirsutus. Abdomen alas posticas sat superans, apice densissime lanuginosopilosum. Alæ sat angustæ.

Eriopyga, Guén. Noct. i. 203.

Male. Body hardly stout. Front rounded. Proboscis rather short. Palpi ascending; second joint almost straight; third very small. Thorax hirsute. Abdomen extending some distance beyond the hind wings, with a large mass of woolly hairs at the tip. Legs of moderate thickness, not very pilose; spurs of hind tibiæ moderately long. Wings rather narrow.

1. ERIOPYGA PUNCTULUM.

Fulvo-rufescens; alæ anticæ lituris indistinctis, dimidio basali margineque exteriore nigris, maculis reniformi et orbiculari nigro marginatis, illa puncto albo; posticæ nigro-cinereæ, subtus flavescens.

Eriopyga punctulum, Guén. Noct. i. 203.

Brazil.

Genus 9. APAMEA.

Corpus robustum. Proboscis mediocriter longa. Palpi validi, porrecti, pilosi; articulus 3us longi-conicus, 2i triente non brevior. Antennæ corporis dimidio multo longiores. Abdomen alas posticas perpaullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriori mediocriter obliquo. *Mas.*—Antennæ crenulatæ.

Apamea, *Ochs. Syst. Gloss. Schmett. von Eur.* iv.

Apamea, p., *Treit.*; *Dup.*; *Boisd.*

Mamestra, p., *Meig.*

Hama, p., Apamea, p., Hadena, p., *Steph.*

Oxygia, p., Exarnis, p., Raphia, p., Astrapetis, p., Po'ia, p.,

Mamestra, p., Calliergis, p., Diataraxia, p., et Parastichtis, p., *Hübner. Verz. Schmett.*

Luperina, p., *Boisd.*; *Guén.*

Hydræcia, p., *Guén. Ann. Soc. Ent. Fr.* x. 251.

Polia, p., *Herr.-Schæff.*

Body stout. Proboscis moderately long. Palpi stout, porrect, pilose; third joint elongate-conical, about one-third of the length of the second. Antennæ much more than half the length of the body. Abdomen extending very little beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, moderately oblique along the exterior border; first, second and third inferior veins near each other; fourth moderately remote.

Male. Antennæ crenulate.

Europe.

A. Antennæ *maris* vix crenulatæ.

A. Alæ anticæ fuscæ.

A. Alæ anticæ non plagiatae.

a. Alæ anticæ linea basali nigra. - basilinea, *Wien. Verz.*

b. Alæ anticæ linea nulla basali nigra.

i. Alæ longiores.

* Vena mediana non alba.

† Alæ anticæ lineis transversis albidis.

gemina, *Hübner.*

†† Alæ anticæ lineis transversis non albidis.

unanimis, *Hübner.*

** Vena mediana alba.

leucostigma, *Hübner.*

ii. Alæ breviores. - - - -

oculea, *Linn.*

- B. Alæ anticæ plagiatae. - - - ophiogramma, *Esp.*
 B. Alæ anticæ cinereæ. - - - - - connexa, *Bork.*
 B. Antennæ maris distincte crenulatae.
 A. Alæ anticæ cinerascente testaceæ. - testacea, *Wien. Verz.*
 B. Alæ anticæ cervinæ, fusco variæ. - *Dumerilii, Dup.*
 C. Alæ anticæ fuscæ, nigricante variæ. - *Desyllesi, Boisd.*

1. APAMEA BASILINEA.

Fusca ; abdomen cinerascens ; alæ anticæ lineis transversis undulatis nigro-fusco ex parte marginatis, annulis duobus conjunctis unoque posteriore nigris ; posticæ cinereæ, basi pallidiores.

———, *Engr. Pap. d' Eur.* 414?

Phalæna-Noctua basilinea, *Gmel. ed. Syst. Nat.* i. 5, 2567, 1143.

Noctua basilinea, *Wien. Verz.* 78, 36, 12. *Fabr. Mant. Ins.* ii. 183, 305 ; *Ent. Syst.* iii. 2, 125, 376. *Esp. Schmett.* iv. pl. 146, f. 1. *Bork. Eur. Schmett.* iv. 510, 203. *Hübner. Samml. Eur. Schmett.* pl. 91, f. 427. *Haw. Lep. Brit.* 95. *Dup. Hist. Nat. Lep. Fr.* vii. pl. 101, f. 4. *Freyer, Beitr.* pl. 29.

Noctua nebulosa, *View. Schmett.* 84, pl. 1, f. 6.

Noctua (Mamestra) basilinea, *Meig. Syst. Besch.* iii. 137, 101, pl. 104, f. 5.

Ogygia basilinea, *Hübner. Verz. Schmett.* 225, 2253.

Luperina basilinea, *Boisd. Ind. Méth.* 113, 892.

Apamea basilinea, *Treit. Schmett.* v. 110, 11. *Guén. Noct.* i. 206, 323.

Hama basilinea, *Steph. Ill. Brit. Ent. Haust.* iii. 5. *Westw. & H. Brit. Moths*, i. 170, pl. 35, f. 7, 8.

Polia basilinea, *Herr.-Schæff. Eur. Schmett.* ii. 269, 266.

Polia insueta, *Herr.-Schæff. Eur. Schmett.* ii. 268, 265, pl. 96, f. 491.

a—g. England. From Mr. Stephens' collection.

h—k. England.

—o. Europe. From M. Becker's collection.

p, q. ——— ?

2. APAMEA CONNEXA.

Pallide cinerea ; abdomen cristis nigricantibus ; alæ anticæ annulis tribus discalibus, plaga postica, guttis costalibus strigulisque marginalibus nigricantibus ; posticæ cinereo-fuscæ obscuriores, ciliis pallidioribus.

———, *Engr. Pap. d' Eur.* 351, a, b.

Noctua connexa, *Bork. Eur. Schmett.* iv. 148.

Apamea connexa, *Treit. Schmett. Eur.* ii. 105; *Suppl.* x. 114.
Guén. Noct. i. 206, 325.

Luperina connexa, *Boisd. Ind. Méth.* 116, 900. *Dup. Hist. Nat. Lép. Fr. Suppl.* iv. 215, pl. 68.

Noctua pabulatricula, *Brahm, Ins. Kal.* 275. *Scriba, Beit. Ins. Gesch.* iii. pl. 18, f. 3.

Noctua elota, *Hübner. Eur. Schmett. Noct.* f. 462.

Raphia connexa, *Hübner. Verz. Schmett.* 212, 2118.

Hama connexa, *Steph. Ill. Brit. Ent. Haust.* iii. 6. *Westw. & H. Brit. Moths*, i. 171, pl. 35, f. 10.

Hadena connexa, *Herr.-Schæff. Eur. Schmett.* ii. 282, 315.

a—c. England. From Mr. Carter's collection.

d. England. From Mr. Chant's collection.

e—m. England. From Mr. Stephens' collection.

n, o. Europe. From M. Becker's collection.

3. APAMEA GEMINA.

Cinereo-fusca; abdomen cinereum; alæ anticæ nigro-fusco sub-nebulosæ, ocellis duobus discalibus fasciisque nonnullis angustis variis sordide albidis nigro marginatis; posticæ cinereæ, margine fuscescente.

Var. *Alæ anticæ striga postica basali, plaga discali maculisque duobus marginalibus nigro-fuscis.*

———, *Engr. Pap. d' Eur.* 476, c.

Noctua satura, *Bork. Eur. Schmett.* iv. 377.

Noctua gemina, *Hübner. Samml. Eur. Schmett.* pl. 102, f. 482.
Frey. Neu. Beit. Schmett. i. 50, pl. 28.

Hadena gemina, *Ochs. Treit. Schmett. Eur.* i. 345; *Suppl.* x. 47.

Luperina gemina, *Boisd. Ind. Méth.* 115, 893.

Noctua remissa, *Hübner. Schmett. Eur. Noct.* pl. 90, f. 423.

Astrapetis remissa, *Hübner. Verz. Schmett.* 219, 2187.

Astrapetis satura, *Hübner. Verz. Schmett.* 219, 2192.

Astrapetis gemina, *Hübner. Verz. Schmett.* 219, 2193.

Noctua oblonga, *Haw. Lep. Brit.* 188.

Noctua obscura, *Haw. Lep. Brit.* 189.

Polia gemina, *Hübner. Verz. Schmett.* ii. 274, 283.

Polia remissa, *Hübner. Verz. Schmett.* ii. 274, 282.

Mamestra? furva, *Steph. Ill. Brit. Ent. Haust.* ii. 191.

Hadena remissa, *Steph. Ill. Brit. Ent. Haust.* ii. 181. *Westw. and H. Brit. Moths*, i. 162, pl. 33, f. 2.

Hadena oblonga, *Steph. Ill. Brit. Ent. Haust.* ii. 182.

- Hadena obscura*, Steph. Ill. Brit. Ent. Haust. ii. 184.
Noctua anceps, Dup. Hist. Nat. Lép. Fr. vii. 109, pl. 107, f. 5.
Noctua submissa, Dahl.
Apamea gemina, Guén. Noct. i. 208, 328.
Polia gemina, Herr.-Schæff. Schmett. Eur. ii. 274, 283.
a—r. England. From Mr. Stephens' collection.
s—v. England.
u—z. Europe. From M. Becker's collection.
aa. ———?

4. APAMEA UNANIMIS.

- Cervino-fusca*; abdomen cinereum; alæ anticæ strigis basalibus et discalibus, lineis transversis undulatis guttisque marginalibus nigris, annulis reniformi et orbiculari albis incompletis; posticæ cinereo-albidæ, venis margineque fuscescentibus, ciliis albidis.
Noctua unanimis, Hübn. Samml. Eur. Schmett. Noct. pl. 120, f. 556. Freyer, Neu. Beit. Schmett. iv. pl. 371; Ent. Zeit. Stett. ii. 96.
Apamea unanimis, Treit. Schmett. Eur. Suppl. x. 62. Steph. Ill. Brit. Ent. Haust. iii. 9. Guén. Noct. i. 290, 329.
Luperina unanimis, Boisd. Ind. Méth. 115, 894.
Noctua secalina, Haw. Lep. Brit. 139, 210.
Apamea secalina, Steph. Ill. Brit. Ent. Haust. iii. 8. Westw. & H. Brit. Moths, i. 178, pl. 37, f. 6.
Mamestra unanimis, Hübn. Verz. Schmett. 214, 2137.
Polia unanimis, Herr.-Schæff. Schmett. Eur. ii. 273, 281.
a—f. England. From Mr. Stephens' collection.
g—h. England.
i, j. Europe. From M. Becker's collection.

5. APAMEA OPHIOGRAMMA.

- Albida*; caput nigro varium; palpi supra, antennæ pedesque nigra; thorax nigro fasciatus; tarsi albo-cincti; alæ anticæ cervinæ albo variæ, nigro punctatæ, fascia undulata exteriori fusca, maculis duabus apud marginem exteriori plagaque maxima costali nigris; posticæ cinereo marginatæ.
 ———, Engr. Pap. d' Eur. 529, a, b.
Noctua ophiogramma, Esp. Schmett. iv. pl. 182, f. 2. Hübn. Samml. Eur. Schmett. Noct. pl. 76, f. 355. Dup. Hist. Nat. Lép. Fr. iv. 135, pl. 109. Frey. Neu. Beit. Schmett. i. pl. 75, f. 3

Luperina ophiogramma, *Boisd. Ind. Méth.* 115, 896.

Noctua biloba, *Haw. Lep. Brit.* 135, 209.

Calliergis ophiogramma, *Hübner. Verz. Schmett.* 244, 2428.

Apamea ophiogramma, *Treit. Schmett. Eur.* v. 2, 91, 3; *Suppl.* x. 66. *Steph. Ill. Brit. Ent. Haust.* iii. 11. *Westw. & H. Brit. Moths*, i. 178, pl. 37, f. 10. *Guén. Noct.* i. 209, 331.

Noctua (Apamea) ophiogramma, *Meig. Syst. Besch.* iii. 148, 119, pl. 105, f. 4.

Polia ophiogramma, *Herr.-Schæff. Schmett. Eur.* ii. 275, 287.

a—g. England. From Mr. Stephens' collection.

h—j. England.

k, n. Europe. From M. Becker's collection.

6. APAMEA LEUCOSTIGMA.

Cervino-fusca; abdomen cinereum; alæ anticæ maculis reniformi et orbiculari testaceo marginatis, vena mediana alba, fascia lata exterior pallide cervina; posticæ cinereæ.

———, *Engr. Pap. d'Eur.* 389, a—c.

Noctua leucostigma, *Hübner. Samml. Eur. Schmett. Noct.* pl. 80, f. 375.

Noctua fibrosa, *Hübner. Samml. Eur. Schmett. Noct.* pl. 82, f. 385.

Dup. Hist. Nat. Lép. Fr. iv. 132, pl. 109.

Diataraxia fibrosa, *Hübner. Verz. Schmett.* 219, 2196.

Apamea fibrosa, *Steph. Ill. Brit. Haust.* iii. 7. *Westw. & H. Brit. Moths*, i. 176, pl. 37, f. 1, 2. *Guén. Noct.* i. 210, 332.

Noctua lunina, *Haw. Lep. Brit.* 134, 209.

Apamea leucostigma, *Treit. Schmett. Eur.* ii. 331.

Hydræcia fibrosa, *Guén. Ann. Soc. Ent. Fr.* x. 237.

Luperina leucostigma, *Boisd. Ind. Méth.* 115, 897.

Hydræcia leucostigma, *Steph. Cat. Brit. Lep.* 86.

a. England. Presented by S. Stevens, Esq.

b. England. Presented by — Harrison, Esq.

c—i. England. From Mr. Stephens' collection.

j, k. England.

l. Europe. From M. Becker's collection.

7. APAMEA OCULEA.

Cinereo-ferruginea; abdomen subtestaceum; alæ anticæ lineis transversis plurimis flexuosis fuscis, litura discali transversa alba nigro interlineata, punctis apud venas exteriores nigricantibus; posticæ cinereo-testaceæ, margine obscuriore.

Var. *Litura discalis testacea*, *linea nigricante*.

—————, *Engr. Pap. d'Eur.* 393, a—c.

Phalæna-Noctua oculea, *Linn. Faun. Suec.* 1215. *Gmel. ed. Syst. Nat.* i. 5, 2574, 1169.

Noctua oculea, *Illig. Mag. Ins.* 223. *Fabr. Sp. Ins.* ii. 238, 139; *Mant. Ins.* ii. 179, 283; *Ent. Syst.* iii. 2, 116, 350. *Haw. Lep. Brit.* 141.

Noctua secalis, *Wien. Verz.* 78, 17.

Noctua nictitans, *Esp. Schmett.* pl. 126, f. 6. *Hübner. Eur. Schmett. Noct.* pl. 135, f. 619.

Noctua didyma, *Esp. Schmett.* pl. 126, f. 7. *Bork. Eur. Schmett.* iv. 465, 185.

Noctua leucostigma, *Esp. Schmett.* iv. pl. 159, f. 7.

Noctua Secalina, *Hübner. Eur. Schmett. Noct.* pl. 80, f. 97; pl. 89, f. 420; pl. 135, f. 619, 620. *Dup. Hist. Nat. Lép. Fr.* vi. pl. 100, f. 5.

Noctua lamda, *View. ? T. V.* ii. 81.

Noctua lugens, *Marsh. Haw. Lep. Brit.* 212.

Noctua I-niger, *Haw. Lep. Brit.* 211.

Noctua furca, *Haw. Lep. Brit.* 209.

Noctua rava, *Haw. Lep. Brit.* 137, 209.

Apamea didyma, *Treit. Schmett.* v. 2, 86, 2. *Steph. Ill. Brit. Ent. Haust.* iii. 8.

Apamea oculea, *Steph. Ill. Brit. Ent. Haust.* iii. 9. *Westw. & H. Brit. Moths*, i. 177, pl. 37, f. 7—9. *Guén. Noct.* i. 210, 333.

Apamea I-niger, *Steph. Ill. Brit. Ent. Haust.* iii. 10.

Apamea furca, *Steph. Ill. Brit. Ent. Haust.* iii. 10.

Parastichtis didyma, *Hübner. Verz. Schmett.* 213, 2121.

Parastichtis vilis, *Hübner. Verz. Schmett.* 213, 2122.

Noctua (Apamea) didyma, *Meig. Syst. Besch.* iii. 147, 118, pl. 106, f. 11.

Luperina didyma, *Boisd. Ind. Méth.* 115, 895.

Polia didyma, *Herr.-Schæff. Schmett. Eur.* ii. 274, 285.

Polia moderata, *Herr.-Schæff. Schmett. Eur.* ii. 274, 286, pl. 72, f. 370.

a—sss. England. From Mr. Stephens' collection.

ttt—www. England.

xxx—zzz. Europe. From M. Becker's collection.

aaaa, bbbb. Europe. From Mr. Milne's collection.

cccc. Germany.

8. APAMEA TESTACEA.

Cinerascens; alæ anticæ litura basali, annulis duobus discalibus, strigis costalibus lineisque nonnullis transversis undulatis nigricantibus, margine inter venas nigro.

———, *Engr. Pap. d'Eur.* 451, a, b.

Noctua testacea, *Wien. Verz.* 81, 11. *Hübner. Samml. Eur. Schmett.*

Noct. f. 139. *Dup. Hist. Nat. Léop. Fr.* iii. 133, pl. 81.

Exarmis testacea, *Hübner. Verz. Schmett.* 225, 2259.

Noctua unca, *Haw. Lep. Brit.* 96, 194.

Noctua lunato-strigata, *Haw. Lep. Brit.* 97, 194.

Noctua X-notata, *Haw. Lep. Brit.* 98, 194.

Hadena testacea, *Treit. Schmett. Eur.* ii. 107.

Luperina testacea, *Boisd. Ind. Méth.* 113, 869. *Guén. Noct. i.* 182, 282.

Hama testacea, *Steph. Ill. Brit. Ent. Haust.* iii. 5. *Westw. & H. Brit. Moths*, i. 171, pl. 36, f. 9.

Polia testacea, *Herr.-Schæff. Eur. Schmett.* ii. 257, 227.

a—ff. England. From Mr. Stephens' collection.

gg—kk. England.

ll—mm. Europe. From M. Becker's collection.

9. APAMEA DUMERILII.

Cervina; thorax fusco fasciatus; alæ anticæ disco margineque exteriori fuscescentibus, lineis transversis pallidioribus et nigricantibus, fascia exteriori pallidiori, lituris duabus discalibus albidis; posticæ cinereo-albidæ.

Luperina Dumerilii, *Dup. Hist. Nat. Léop. Fr.* iv. 277, pl. 90, f. 4.

Treit. Schmett. Eur. Suppl. x. 66. *Boisd. Ind. Méth.* 113,

868. *Guén. Ann. Soc. Ent. Fr.* vi. 238; *Noct. i.* 183, 283.

Polia Dumerilii, *Herr.-Schæff. Eur. Schmett.* ii. 257, 228; ii. *Noct.* pl. 21, f. 101.

a, b. Europe. From M. Becker's collection.

10. APAMEA DESYLLESI.

Statura L. Dumerilli; alæ anticæ fusæ, strigis ordinariis obscurioribus, striga fulgurali albido-cinerea, macula reniformi albido nitide scripta, macula orbiculari ovata pallida intus infuscata, extus fusco circumdata oblique posita; posticæ albidæ.

Luperina Desyllesi, *Boisd. Ind. Méth.* 113, 867. *Guén. Noct.* i. 183, 284.

West France.

North America.

11. APAMEA FINITIMA.

Cervina ; thorax pilis nonnullis apice nigris ; abdomen testaceum, crista nigra ; alæ anticæ striga basali, lineis duabus transversis guttisque marginalibus nigris, maculis reniformi et orbiculari maculaque apicali albido-cervinis, illis nigro marginatis ; posticæ cinereo-albidæ, margine fuscescente, ciliis albidis.

Apamea finitima, *Guén. Noct.* i. 206, 324.

a. New York. Presented by E. Doubleday, Esq.

12. APAMEA MACTATA.

Mas. Cinerea ; thorax fasciis nigris ; alæ anticæ nebulis obscurioribus, lituris basalibus et costalibus, lineis transversis incompletis undulatis strigisque marginalibus nigris, annulis reniformi et orbiculari nigris incompletis, posticæ pallide cinereæ, linea margineque fuscescentibus.

Apamea mactata, *Guén. Noct.* i. 207, 326.

a. Trenron Falls, New York. Presented by E. Doubleday, Esq.

13. APAMEA MODICA.

Albida ; alæ anticæ ex parte subcervinæ, lituris costalibus lineolisque exterioribus et marginalibus nigris, plaga discali fusca, annulis reniformi et orbiculari nigris incompletis ; posticæ margine fuscescente.

Apamea modica, *Guén. Noct.* i. 207, 327.

a, b. Trenton Falls, New York. Presented by E. Doubleday, Esq.

14. APAMEA IASPIS.

Canescens ; thorax atomis nonnullis nigris ; alæ anticæ atomis nonnullis nigris, basi nigro conspersæ, annulis reniformi et orbiculari magnis incompletis lineisque transversis angulatis lineaque interrupta marginali nigris, striga brevi lata postica alba.

Apamea Iaspis, *Guén. Noct.* i. 209, 330.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Africa.

Group 1.

Like the European group.

15. APAMEA INFERIOR.

Cervina ; thorax linea antica transversa fusca ; alæ anticæ maculis reniformi et orbiculari bene determinatis, lineis marginalibus obscurioribus, ciliis longis denticulatis ; posticæ cinereæ, subdenticulatæ.

Apamea inferior, Guén. Noct. i. 211, 334.

Abyssinia.

Group 2.

Alæ anticæ margine exteriori plus obliquo, plus denticulato.

Allied to *Hadena*. Fore wings with the exterior border more oblique and more denticulated.

16. APAMEA CAPENSIS.

Alæ anticæ obscure violaceo-cinereæ, maculis reniformi et orbiculari distinctis nigro lineatis, illa basi albo marginata, hac ovata obliqua ; posticæ nigro-cinereæ.

Apamea capensis, Guén. Noct. i. 213, 337.

Cape.

Mauritius.

17. APAMEA BASIMACULA.

Alæ anticæ pallide cinereæ, striga transversa pallida, macula basali alterisque apicalibus nigris ; posticæ fuscae, ad basim pallidiores.

Apamea basimacula, Boisd. Faune Ent. Mad. Bomb. et Maur. Lép. 93, 2.

Mauritius.

Asia.

18. APAMEA UNDICILIA.

Cervina ; alæ anticæ pallide cervinæ, fusco conspersæ, lituris costalibus fasciisque duabus fuscis, fascia 1a antice abbreviata, 2a marginali incisa testaceo guttata, maculis reniformi et orbiculari magnis, ciliis fusco lineatis ; posticæ pallide cinereæ, marginibus latis fuscescentibus.

Fawn-colour. Abdomen paler than the thorax. Fore wings pale fawn-colour, speckled with brown, with brown marks along the costa, and with two brown irregular bands; the first shortened in front, partly surrounding the reniform and orbicular spots, and containing a hindward fawn-coloured spot; the second marginal, much indented, and containing testaceous dots; reniform spot and orbicular spot large, of the usual form; ciliæ interlined with brown. Hind wings pale cinereous, with broad brownish borders. Length of the body $5\frac{1}{2}$ lines; of the wings 12 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Australia.

Group 1.

Like the second African group.

19. APAMEA SALIARIS.

Cervino-fusca; abdomen cinereum; alæ anticæ maculæ orbicularis margine, lituris costalibus lunulisque marginalibus nigris, plaga apicali, macula reniformi lineisque undulatis transversis testaceis, fasciis duabus (una exterior altera marginali) venisque glaucescentibus; posticæ fuscescentes.

Apamea saliaris, Guén. Noct. i. 212, 335.

Australia.

20. APAMEA SPUMIGERA.

Cinerea, thorax fasciis nigris; abdomen cervino-cinereum, lateribus nonnunquam albo-nigroque variis; alæ anticæ plaga maxima discali fasciisque variis nigro-fuscis; costa, basi maculaque diffusa exterior rufescentibus, fascia repanda exterior maculisque orbiculari et reniformi albidis, margine exterior cinereo strigis nigris; posticæ fuscescentes, albo plus minusve variæ.

Apamea spumigera, Guén. Noct. i. 212, 336.

Australia.

1. The first part of the paper is devoted to a general
discussion of the problem. It is shown that the
problem is of great importance and that it has
not been completely solved. The author then
presents a new method for solving the problem.
This method is based on the use of the
Fourier transform and the method of steepest
descent. It is shown that this method is
very efficient and that it can be used to
solve a wide variety of problems.

2. In the second part of the paper, the author
applies the method to the problem of the
diffusion of a gas. It is shown that the
method can be used to calculate the rate of
diffusion of a gas through a membrane.
The results of the calculations are compared
with the results of experiments and it is
found that they are in good agreement.

3. In the third part of the paper, the author
applies the method to the problem of the
diffusion of a liquid. It is shown that the
method can be used to calculate the rate of
diffusion of a liquid through a membrane.
The results of the calculations are compared
with the results of experiments and it is
found that they are in good agreement.

4. In the fourth part of the paper, the author
applies the method to the problem of the
diffusion of a solid. It is shown that the
method can be used to calculate the rate of
diffusion of a solid through a membrane.
The results of the calculations are compared
with the results of experiments and it is
found that they are in good agreement.

Walker, Francis

List of the specimens of Lepidopterous Insects in the Collection of the
British Museum

Bd.: Part 9

London 1856

Zool. 543 br-9

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